The Train Wrecker Who Terrified Europe—*Page* 34

RAILROAD STORIES

NOVEMBER

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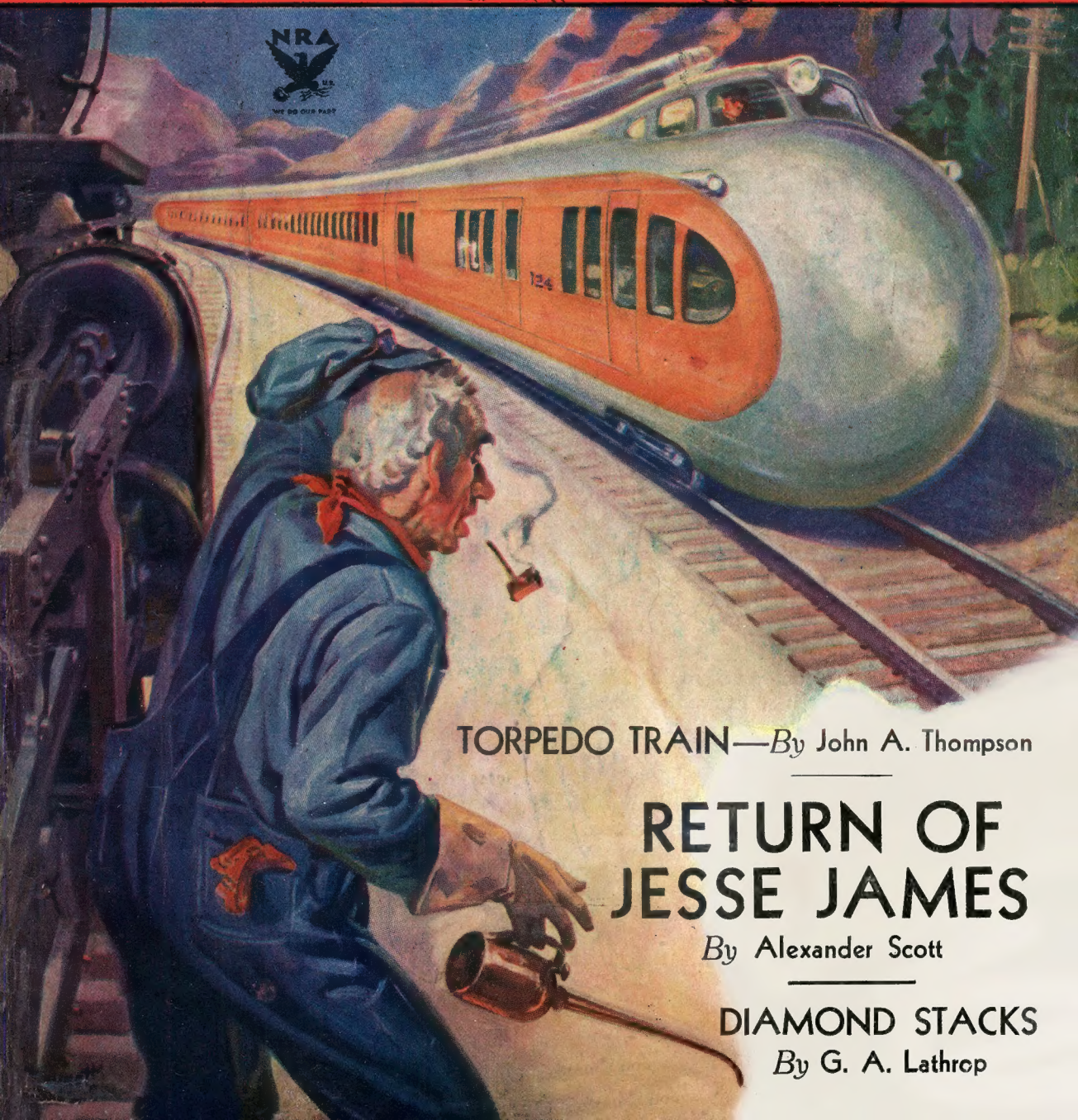

TORPEDO TRAIN—*By* John A. Thompson

RETURN OF JESSE JAMES

By Alexander Scott

DIAMOND STACKS

By G. A. Lathrop

HOW'S YOUR BREATH TODAY?

Any woman, any man, who fails to keep the breath beyond suspicion is headed for neglect.

The condition of your breath should be your first consideration—every day. Nothing repels others, even loved ones, like a case of halitosis (unpleasant breath).

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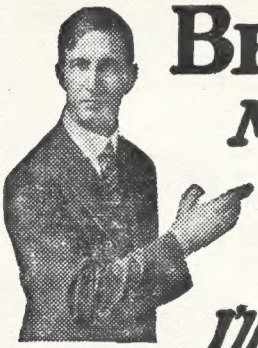
And it is so easy to be sure! Simply rinse the mouth with Listerine. Listerine is antiseptic and therefore instantly halts fermentation of tiny food particles in the mouth and on the teeth and gums—the cause of 90% of breath odors. Having thus struck at the cause of odors, Listerine gets rid of the odors themselves.

Tests show that Listerine instantly overcomes odors that ordinary mouth washes cannot conquer in 12 hours.

Begin today to make your breath agreeable. Every morning and night, and between times before social or business engagements, use Listerine. Lambert Pharmacal Co., St. Louis, Mo.

LISTERINE

instantly conquers halitosis (bad breath)



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An invention made possible by Radio. Employs many well-trained Radio men for jobs paying $75 to $200 a week.

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Real Opportunities Ahead for Trained Men

It's hard to find a field with more opportunity awaiting the trained man. Why in 1932—the worst year of the depression—the Radio Industry sold $200,000,000 worth of sets and parts! Manufacturers alone employed nearly 100,000 people! About 300,000 people worked in the industry. In 1932, broadcasting had its most profitable year. It's a gigantic business, even in the worst business years! And look what's ahead! Millions of sets becoming obsolete annually. 17,000,000 sets in operation that need servicing from time to time! Over 600 great broadcasting stations furnishing entertainment and news to 100,000,000 people. These figures are so big that they are hard to grasp! Yet, they are all true! Here is a new industry that has grown quickly into a commercial giant.

Get Into This Field With A Future

There's opportunity for you in Radio. Its future is certain. Television, short wave, police Radio, automobile Radio, midget sets, talking movies, public address systems, aircraft Radio—in every branch, developments and improvements are taking place. Here is a real future for thousands and thousands of men who really know Radio. Get the training that opens the road to responsibility, good pay and success! Send the coupon now and get full particulars on how easy and interesting I make learning at home. Read the letters from graduates who are today earning good money, in this fascinating industry.

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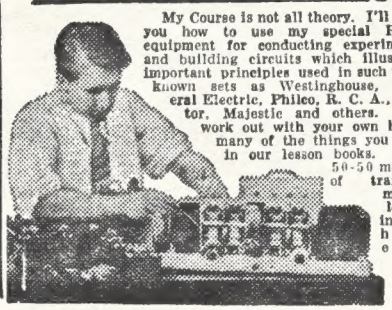

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RAILROAD STORIES

$1.50 a Year

NOVEMBER, 1933

Vol. XII, No. 4

Formerly RAILROAD MAN'S MAGAZINE—*Title Registered in U. S. Patent Office*

FICTION AND TRUE TALES

Diamond Stacks (Complete Novelette).....G. A. Lathrop 6
Return of Jesse James.....Alexander Scott 50
The Deadhead Passenger.....Victor Maxwell 58
Railroaders All.....A. Leslie 70
Torpedo Train.....John A. Thompson 98
59 Years in the Cab.....John E. Mooney 104
Slim Gordon's Alibi.....Fritz Lee 107
Pork Chop Special.....John A. Saxon 110
Red Board.....H. E. Webster 122

ILLUSTRATED FEATURES

The Train Wrecker Who Terrified Europe.....Zeta Rothschild 34
Famous Engineers (John Draney).....Stookie Allen 69
Stranger Than Fiction.....E. J. Burns 80
Under Chicago Streets.....Frank A. Hilker 94
How I Built a Wooden Locomotive Model.....W. A. Lucas 126
Locomotives of the Rutland Railroad..... 130
A Narrow Gage Golden Anniversary.....John R. Wilmot 139

SIX POPULAR DEPARTMENTS

Railroad Rimes.....57, 97
By the Light of the Lantern. 87
The Boomers' Corner..... 109
Sunny Side of the Track..... 121
On the Spot..... 132
International Engine Picture Club 140

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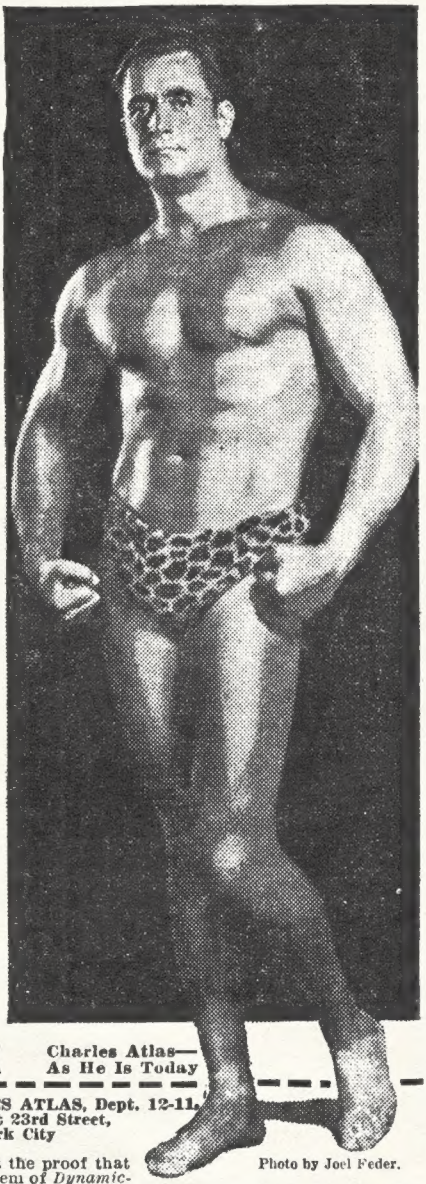

Photo by Joel Feder.

By Charles Atlas

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New York City

Charles Atlas—As He Is Today

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29x5.25-19		2.75	1.15
30x5.25-20		2.75	1.15
31x5.25-21		2.95	1.15
28x5.50-18		2.95	1.15
29x5.50-19		2.95	1.16
30x5.00-18		2.95	1.16
31x6.00-19		2.95	1.15
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33x4	2.75	0.85
34x4	2.75	0.85
32x4½	2.95	1.15
33x4½	2.95	1.15
34x4½	2.95	1.15
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Hotels, Cafes Enjoy Boom
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Nation's Hotels Will Add That Many Employees.
The legalization of the sale of beer in at least twenty-three States on Friday means immediate employment for 25,000 men and women in hotels and restaurants
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HUGE RUSH
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FOR BEER
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25,000 NEW JOBS

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☐ Please send your free booklet of styles, I am interested in Jackets as checked below:—

☐ Coat with collar ☐ Vest with V neck
☐ Coat without collar ☐ Vest with square neck

My size is..... (sizes 34 to 50). My dealer's name is .....

My name .....
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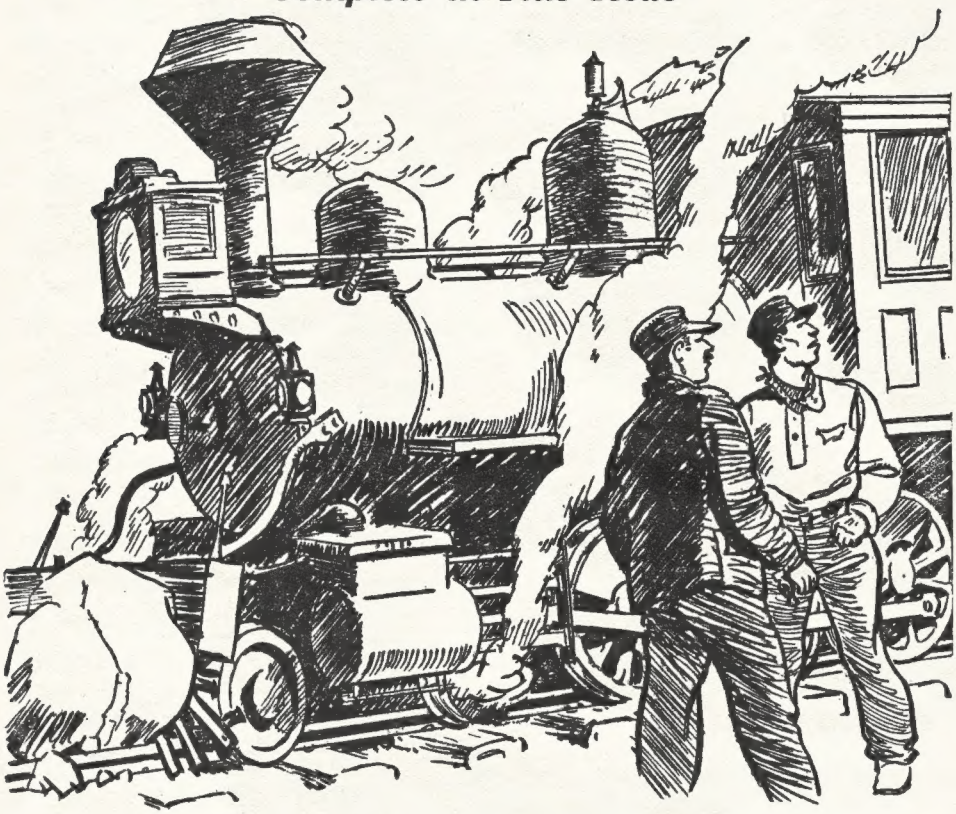
Diamond Stacks

Complete in This Issue



You Can't Judge the Men of a Railroad by the Size of Its Rolling Stock!

FOR over two hours the little narrow-gage passenger on the Rainy River Line had climbed the four per cent grade leading to the roof of the continent. The train had been broken in two sections at the foot. Jerry Morgan was riding the first section, which consisted of four coaches and two chuffing diamond stacks on the head end. The second had three coaches pulled by a single locomotive.

Jerry had seen the following train a dozen times during the crooked ascent, moving snail-like and solitary along the side hill cuts and through the forests of blue spruce and lodge-pole pine.

Now the first section was halted at the top of the divide, waiting for the following section in order to consolidate. Together with a "deadheading" brakeman he had met coming up the pass, Jerry crawled through a narrow door in the side of the long snowshed and stood looking off toward the West, where range after range of timber-clad mountains unfolded, fading to purplish haze in the distance.

By G. A. LATHROP
Ex-Fireman and Brakeman, D.&R.G.W.;
Author of "Rusted Rails," etc.

"This Is a Hell of a Piece of Railroading"

Somewhere down there, beyond the farthest mountain range, lay Jerry's future. At least he hoped so.

"That's timberline," explained the brakeman, pointing a thousand feet below where the last gnarled, twisted pines gave way to creeping juniper and hardy, frost-immune shrubs.

"You can see th' main line winding around in that hole with a sidetrack beside it," he said. "That's where she's a sweet job holding these trains with straight air."

"I've never seen a narrow-gage line before," Jerry said thoughtfully.

"And as a consequence you'll think it's a scissorbill job," grinned the brakeman. "Mere routine. But it ain't." His eyes flashed, his shoulders went back.

"This railroading is big!" he went on. "When we ain't bucking four per cent grades we're chaining rocks off the track in the Black Canyon. When we ain't steering a link into a slot in the casting on the end of a car we're making a three-way coupling where this slim gage joins th' standard gage."

"Its reputation extends clear up to Canada," smiled Jerry.

"That ain't the half of it!" His

companion was warming to the subject. "Every man working here is a go-getter. They got to be to stick around Old Man Holden, our assistant super. Holden's the kind of bird who lives by the Book of Rules. He's square as a right angle, got a voice like a mad bull and uses it." The brakeman abruptly changed the subject. "You're a railroader, too, ain't you?"

"Yes."

"Just laying off, or hunting a new job?"

"Hunting a new job." Jerry spoke briefly. No use going into his reason for having quit the B. & Y., in the Maple Leaf Dominion, after three years in engine service, just when he was called up for engineer's examination.

In the snowshed they heard the locomotives chuff, while link and pin draft gear rattled.

"Guess we better get on again," suggested the brakeman. "Sounds like our train is about to slide down th' mountain."

He squeezed through the narrow door and faded into the darkness of the shed. Jerry followed, wondering whether he would have any luck getting a job on this pike with its short trains, its glamour, its he-man railroading.

THE deadheading brakeman got off at Gilson, division point. Jerry kept his seat, since the destination on his ticket was Crystal, a helper-engine terminal some forty miles farther west.

Later the seven car train, with a little ten-wheel passenger jack on the smoky end, dove into the Black Canyon. Spring hung hazy in the chasm. Choke-cherry bushes were in full blossom and wild raspberries huddled against the shaded north walls. On his left the river was a roaring torrent which lapped almost at the ends of the ties.

Someone wedged down in the seat beside Jerry Morgan. The conductor, a tall, stoop-shouldered fellow with a pleasant grin on his leathery face, opened the conversation.

"I see by your ticket that you get off at Crystal," he began affably.

Jerry nodded. "I'm hoping to land a job in engine service there."

"That won't be hard. From what I hear, firemen are scarce on the Rainy River, what with the silver an' gold rush around Lake City an' Ouray."

"You've been working for this railroad quite a while?" Jerry wanted to know.

The tall fellow chuckled. "I ran a work train when they built this canyon twenty years ago." He held up his right hand and wriggled the stub of an index finger. "None of us old-timers ever was scissorbills, meanin' we wouldn't use paddles to make couplin's like some of th' younger heads are doin'. I lost this finger when I was buckin' freight."

Jerry slumped deeper in the plush seat. "Funny the Rainy River doesn't install the new automatic couplings," he remarked.

The conductor grew interested. "You've worked around 'em?"

"Yes. The B. & Y. changed over in 1900, two years ago."

"How do they work?"

"Just as their name implies. When they click together they couple without dropping a pin through a link."

The conductor whistled in surprise. Then he rose to his feet. "Well, I expect I'll be seein' more of you from now on. Hope you land a job in Crystal."

Jerry sat for a few minutes listening to the click of wheels over the forty-

five pound rails. At length, deciding he was thirsty, he started toward the water cooler. A sudden lurch of the coach threw him off balance. Before he could catch himself he had fallen almost in the lap of a solitary girl who rode near the center of the coach.

Jerry had an impression of gold-bronze hair, eyes a deep violet and cheeks flushed with health.

"I'm sorry," he stammered as he drew upright. "That darned train caught me off balance."

"Oh, that's all right." The girl smiled and straightened her skirt over her knees. "I see you're a Laplander," she added impishly.

With a grin of embarrassment, Jerry walked on to the cooler and drew himself a glass of water. He stole sly glances toward the girl and wondered where she was going. Just as he raised the glass to his lips, the train stopped so violently he was thrown forward.

The conductor came running through the car and dashed out the front door. Curious as to the cause for the sudden stop, Jerry followed.

THE little ten-wheeler had struck a cook-stove-sized rock. Her pilot was smashed and her drivers were on the ties.

The engineer was out surveying the damage, scratching at his head with a hammer handle. His fireman, on hands and knees, was peering underneath.

"Reckon we can rerail her without callin' the wrecker?" asked the conductor as Jerry came up.

"Yeah. She'll go right back on with frogs," said the engineer, referring to turtleback steel objects used to rerail cars and locomotives.

A husky man wearing a black serge suit and high wing collar bustled up. His face wore a scowl of anger and he chewed at a black cigar.

"This is a hell of a piece of railroading," he shouted, brandishing two hamlike fists. "Striking a boulder in broad daylight!"

The conductor eyed him in silence as the engineer answered:

"This rock is on a sharp curve and we was right on top of it before we seen it. You can't stop on a dime with straight air, Mr. Holden."

Holden stepped out so he could peer ahead. Then his face crinkled in a grin.

"All right," he said. "You win."

So this was Bart Holden, assistant superintendent! Jerry surveyed him intently. Quick to anger but equally quick to admit a mistake. A man to get on the right side of, if possible. Tall, thick-necked, heavy-featured and clear-eyed. And young, too, maybe twenty-eight years of age. The nickname "Old Man," which is applied to many officials, did not fit spry, active Bart Holden.

The engineer walked toward the rear of the tender where two "turtlebacks" hung. Returning with one of them, he thumped it on the ties beside the wheels. Then he knelt and, after much grunting and puffing, placed the implement where it would raise the drivers and drop them back on the rails.

Less than twenty minutes later the engineer crawled up into the open-decked cab and after the engine had been cut off from the train he moved her slowly ahead. The frogs raised her wheels, which thumped soggily back on the rails.

Five minutes later they were on the way again, twisting through the canyon like a restless snake.

"Crystal, next stop. Twenty min-

utes for dinner," droned a brakeman as he made his way through the car.

Crystal? That was Jerry's destination, the place where he hoped he might get back in the game again, on the smoky end.

"Big Hat" Kennedy

JERRY dropped from the day coach, lugging a heavy valise which contained all his earthly belongings. Beside the Crystal depot was a long red eating-house, before the open doors of which a white-clad porter was beating away on a steel triangle. Near by stood a water tank and a section house, and through a cottonwood thicket several dwelling houses could be seen.

Jerry came back to his surroundings just in time to see the violet-eyed girl being assisted off the train by Mr. Holden. Jerry watched her walk toward the eating-house, accompanied by the assistant super carrying her valise.

"Must be going to stay here in Crystal," Jerry murmured to himself. "I'm kinda glad of it, too."

As he was hungry, Jerry followed the crowd into the restaurant. He noticed a sign over the door, "Black Canyon Hotel." The dining-room was large, with painted walls and ceiling. A dozen white-covered tables accommodated those who did not prefer a lunch counter.

Dinner had been cooked in readiness, and the passengers began gulping their food hurriedly, knowing they must stow a full meal beneath their belts in less than twenty minutes. Jerry took a place at the lunch counter beside Mr. Holden.

"A full dinner?"

Jerry hadn't noticed her approach, but the voice riveted his attention. It was the same bronze-haired girl who had just got off the train.

"You working here?" he blurted.

The waitress flashed a smile. "Nothing strange about that, is there? Do you want a full dinner?"

"Yes."

Jerry watched her walk toward the kitchen, noted the grace with which she carried herself. He had just finished drinking his coffee when he accidentally overheard Mr. Holden say to Violet Eyes:

"I'll be seeing you often, because my work will keep me around Crystal most of the time."

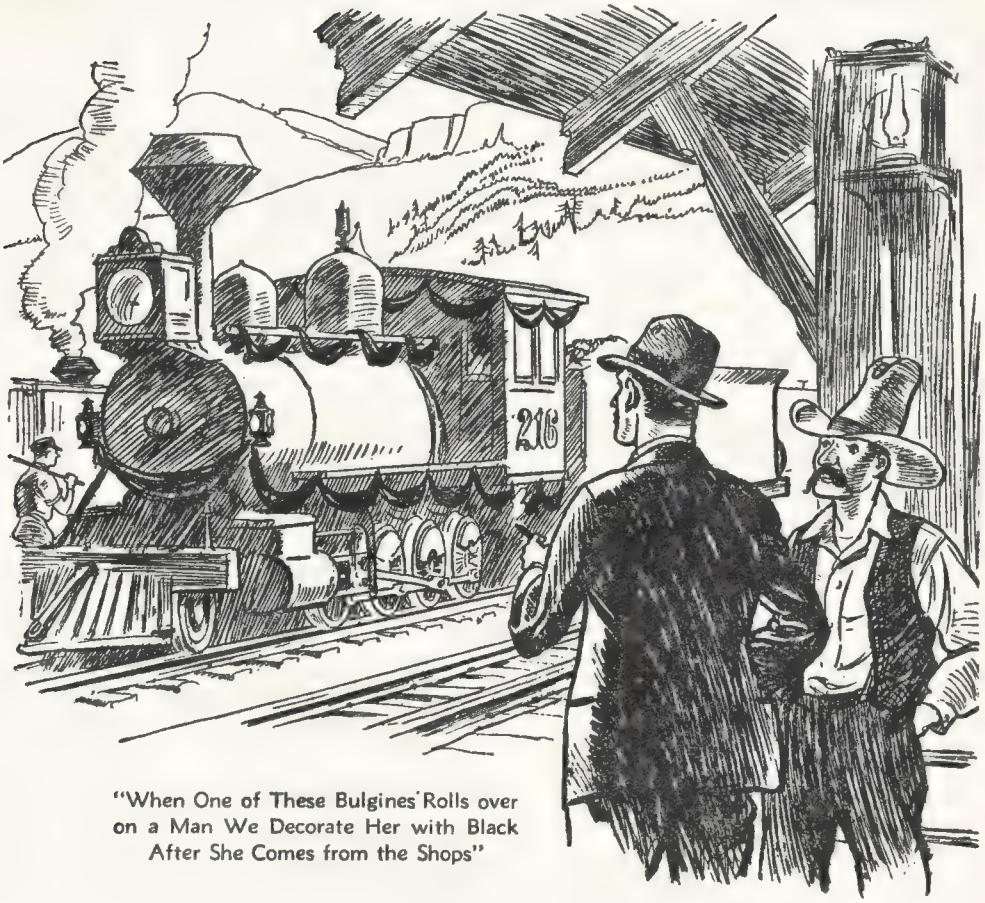
And it didn't make Jerry feel any better when the girl's reply fell on his ears:

"It will prevent me from being so homesick and lonesome."

Jerry paid for his dinner and walked outside, where the last of the passengers were getting back on the train. Two helper engines were coupled to the ten-wheeler, ready to drag the train up a four per cent grade to Serene Summit, five miles away.

Jerry watched them whistle off, heard cylinder cocks hiss and the muffled barks of exhausts coming out of the diamond stacks. The markers on the rear car bobbed past; and then he observed the roundhouse, located over against a mountain.

Half a dozen locomotives were outside, all of them little 2-8-0 types with ungainly diamond stacks, forty-inch drive wheels and sliding valves. The one nearest to him was newly painted, and black crape was draped over the boiler. She was numbered 216. Curi-



"When One of These Bulgines Rolls over on a Man We Decorate Her with Black After She Comes from the Shops"

ous about the crape, Jerry looked toward the depot for someone who might tell him.

A wizened man not over five feet tall was leaning against the side and chewing meditatively at a piece of willow. He was topped by a ten-gallon, cowpuncher hat which eclipsed his body.

Jerry grinned widely at the grotesque personage and approached him. The man gazed steadily at the 216.

"I was wondering why that engine was draped with black crape," began Jerry.

The stranger jerked his gaze from the 216 and turned a pair of perfectly round eyes on Jerry. He chewed on the willow for a few seconds, then took it from his mouth and spat.

"Ever see a wreath of black crape hung on a door where there's a funeral?" he asked in a high-pitched, squeaky voice.

"You mean somebody died on that engine?"

"An' nothin' else, pard. When one of these bulgines rolls over on a man we decorate her with black after she comes from th' back shops."

"Was it her engineer, fireman or brakeman who was killed?" asked Jerry.

"Fireman. I'm her engineer." The little man eyed Jerry so intently he flushed. "I'm Kennedy," he con-

tinued. "These halfwits on th' hill call me 'Big Hat.' Who're you?"

"Jerry Morgan. I hope to land a job firing out of here."

Big Hat paused, with the willow halfway to his mouth. "From th' looks of them arms an' shoulders, I'd say yuh'll have no trouble. That Two-sixteen is my engine." There was pride in his tone.

Jerry held out a hand, drawn to this odd little fellow. Big Hat shook and Jerry marveled at the strength of his clasp.

"Who do I see about a job?" Jerry inquired.

"Roundhouse foreman, Roades."

"Thanks."

JERRY turned and strolled across to the roundhouse, where he had a talk with Mr. Roades. The interview was brief and to the point.

"Yep," said the foreman, "I'm needin' men bad. I'll give yuh a pass to Fruitvale where th' company doctor lives. After he examines yuh, come back an' fill out th' Book of Rules."

Jerry frowned. Unless the company doctor were rather dumb, Jerry wouldn't pass the exam. But this place appealed to him. It was real. With short trains he would have no trouble getting by, once he was on the job. It wouldn't be the first time.

"Th' company doctor," resumed Roades, "got caught up on one of his examinations a couple of years back. Overlooked a feller's hearin'. Mr. Holden, the assistant super, raised two kinds of hell over that. Since then a man has got to be well nigh perfect to get past th' doctor. But you'll make it in a walk."

Jerry smiled grimly. Roades didn't know everything about this new recruit.

THAT night Jerry caught a freight train to Fruitvale. He watched the two regular brakemen and a swing brakeman decorate the top going down the west side. All three men worked from car to car, carrying pick handles, setting brakes and releasing them so the wheels would not become too hot.

After breakfast the following morning Jerry walked down the bustling main street of the town looking for a fine specimen of manhood who would suit his purpose. He found just the man near the depot, a husky fellow wearing a "thousand mile" shirt and a conspicuous watch chain across his breast.

"You don't work on the railroad here, do you?" Jerry inquired hopefully.

"Nope. Just boomin' through."

"Would you like to make a couple of dollars?"

"Sure, if it's a soft job," laughed the boomer.

"Not much work connected with it," Jerry explained. "I want somebody to take the medical examination for fireman in my place."

"Yeah?" said the boomer, sizing him up. "Not much wrong appearin' about you."

"My eyes are shot."

The wanderer shrugged his shoulders. "Well, I ain't got any trouble that way. Lead me to it."

Jerry pulled out his letter from the roundhouse foreman. "Name's Jerry Morgan. Age twenty-two. Here's a dollar for the doctor. I'll pay you when you bring me a clean bill."

The boomer waddled off, as Jerry sat down in the shadow of the depot to wait. His forehead corrugated, his lips tightened. This iron pike got under a fellow's hide. He brushed a hand across his eyes.

"Fireburn," the doctor back on the B. & Y. had told Jerry Morgan when he went up to take the physical examination to engineer. "If your eyes could be corrected with glasses I'd have you fitted out, but only time will put them back in shape. Until you can pass, I'll have to recommend your transfer back to roundhouse service. Sorry—"

Jerry had pulled the pin and left Canada rather than go back in the roundhouse away from the thrill of speeding along the high iron. He had heard about this narrow-gage road and headed south. These memories were interrupted with:

"Here's your bill of health."

Jerry looked up. The boomer was standing before him extending a doctor's certificate. Jerry paid him and watched the man head for the saloon. Then he caught a light engine back to Crystal and reported to Roades.

When he had finished filling out his examination book the foreman said:

"I'm puttin' yuh on with Big Hat Kennedy, engine two sixteen. Big Hat's a mighty fine feller, but a stickler fer rules, an' fussy around his engine. Keep her clean an' polished, go easy on th' coal, an' you'll find Big Hat a hundred percenter."

"I've met him already," returned Jerry as he went outside.

The Girl With Violet Eyes

THE 216 was standing beside the sandhouse. An engine watchman was filling her massive sandbox. Jerry scrambled up on the pilot and looked at the reflector in the oil headlight. It was polished to glittering brightness. He next inspected his marker lights, finding them speckless.

Then he climbed up in the cab. The boiler extended through it, separating the engineer from the fireman. On the left side was a non-lifting injector, but Big Hat had a number nine inspirator. A lubricator with three unprotected glasses hung above the boiler. The steam gage was marked at 145 pounds. On the right side of the boiler in front of the cab was an eight-inch air pump.

Jerry decided that, although she wasn't much for size, the 216 was a neat little bunch of steel and iron. She was something to be proud of.

He ran into Big Hat on the right-hand side. Big Hat was filling the grease cups on the side rods.

"Howdy, Morgan," greeted the diminutive engineer, tilting the wide brim of his hat so he could squint from under it. "I told Roades to put yuh on with me. I'll make a first class hogger out of yuh if yuh just stick."

"I'm going to stick," said Jerry, hoping deep in his heart that he spoke the truth.

At 9.50 P.M., Jerry was called for a freight train. "You go to Canyon spur an' help shove a freight into town, then help 'em to Serene Summit," instructed the caller.

Jerry knew that east of Crystal the track dropped into the Canyon on a grade of almost three per cent for a mile and a half. A short spur track was built there so the helper engines could head in, then after the freight pulled by they could couple on behind the caboose and help the train to Crystal. From Crystal to Serene Summit all freight trains used three engines.

The new fireman found Big Hat oil-

ing when he reached the roundhouse. Big Hat greeted him pleasantly.

"We back down to Canyon," said the hoghead. "Feller should have eyes like a cat, but I'm able to smell out rocks when I can't see 'em."

Jerry acquiesced.

"An' I want to tell yuh about firin' these teakettles on the Rainy River," advised Big Hat, black oil dribbling unheeded from the snout of his long oiler. "One scoop of coal is satisfactory. Two scoops is plenty, an' three scoops is nothin' short of sluggin' 'em. I never allow my engine to be slugged. Remember, a bright fire, a light fire, an' a white fire. A hundred an' forty-four pounds of steam on th' gage, an' we're friends. She pops at a hundred an' forty-five."

JERRY looked into the two-foot wide and six-foot long firebox. His fire was already spread and burning sluggishly. The gage showed 125 pounds of steam. Jerry slapped a full scoop of coal against the fire ring and watched it cascade over the flames.

Big Hat must have lighted the oil lamps in the cab, because they cast feeble glows over the steam gage and the water glass. The air pump wheezed and clanked. The headlight cast an orange-colored blob of illumination some thirty feet ahead of the pilot.

Jerry squinted into it. Not much chance of seeing obstructions on the track with that kind of light. On the standard-gage B. & Y. quite a number of engines had been equipped with the new-fangled electric headlights. They used a stick of carbon and did a great deal of sputtering, half going out and then blazing into white fury, but they beat these oil headlights.

Big Hat grunted into his side of the cab, carefully extinguished his torch and dropped it in his tool box. Then he raised his hinged seat and climbed up on it, resting on his knees so he could lean across the boiler.

"I just et over in th' beanery," he announced.

Jerry looked up questioningly.

"An' I met that new hasher. There's a sweet little imp if I ever seen one. Golden hair an' everything. Her name's Porter. Marjorie Porter."

Before Jerry could reply, Big Hat had turned his back and was reaching overhead in a small cubbyhole near the ceiling of the cab.

While the fireman watched, Big Hat pulled out half a dozen pieces of green willow. One of them he placed in his mouth and began chewing on it. The others he shoved in his breast pocket like so many pencils.

"Yuh'll have to open th' gates so we can hit th' main stem," he shouted out of the side of his mouth. "I got our orders."

Jerry dropped off with a lighted lantern, threw the stub switch leading from the roundhouse, and Big Hat chuffed toward him, front end of the 216 wreathed in wet steam.

With Jerry back in the cab, the hogger blasted three short ones and the pitch darkness of the canyon swallowed them.

Since they were forced to back the distance to Canyon spur, Jerry gazed into the darkness so intently his eyes smarted. He felt like offering a short prayer that no rocks had tumbled down on the track. This was ticklish railroading, backing into a granite gorge in pitch darkness, feeling their way as they crept along.

And no time while the drive wheels were revolving did the engineer say a word. Big Hat was peculiar in this manner. The moment he pulled back

on his throttle he turned into a clam; the only thing that could jerk a word out of him was something directly concerning the operation of his charge.

With a feeling of thankfulness Jerry finally threw the stub switch leading into Canyon spur and watched the 216 chuff off the main line.

IT was almost an hour before the freight train loomed from the darkness, headlight flickering over the crooked track and offering practically no illumination. Twenty ten-ton coal and box cars rattled past before the rear brakeman swung a wide stop signal.

Jerry had been watching his lantern. Instead of a pin point of light as he knew it should be, he saw only a bunch of broken segments. Little movements of the lantern were indiscernible. Only when the lantern swung a wide stop signal or a full-armed highball could Jerry be sure of the signal. He rubbed his eyes again but it did not help. He grew uneasy.

"I hope all signaling is done on the right side," he said to himself as he dropped into the narrow gangway and opened his firebox door.

Coupled behind the four-wheeled caboose, Big Hat blasted off and the train clanked to motion. Jerry remembered Big Hat's instructions relative to firing the engine. He was careful to spread his coal lightly and evenly. But the glare of the fire had blinded him so it was impossible to see the steam gage.

Less than half a mile from Canyon, the hoghead shoved into the deck, jaws working double time on his willow.

"Get up on my side," he yelled. "I want to see how she's cuttin' her fire. Boneheaded boilermakers never did know how to draft an engine."

"Is she lagging?" asked Jerry.

"Yeah."

Jerry shoved past Big Hat and took a place on the right-hand side. The reverse lever clanked with each exhaust and the injector sang a high-pitched, tinny whine. Since Big Hat had her set where she would do her work, there was nothing for Jerry to think about except the sand lever.

In a short time Big Hat stepped up in the cab. "She's tearin' a hole under th' flue sheet," he called out. "I'll fix that in Crystal."

While Big Hat opened the front end to make an adjustment on the drafting of his engine, Jerry went across to the hotel for something to eat. The girl with violet eyes was sitting behind the lunch counter.

"What's on the switch list?" asked Jerry sociably.

She handed him a bill-of-fare. Instead of reading it at once, he smiled and remarked:

"Maybe I might drop in and talk to you once in a while."

The waitress shook her head. "Thanks, but I'm not much of a conversationalist. And now your order, please."

Jerry flushed, then gave his order and waited for Marjorie Porter to return. As she set his meal on the table, he said in a breezy manner:

"My name's Jerry Morgan. I'm single and just went to work here."

She did not appear even a little bit interested.

"Anything else you'd like to know about me?" The fireman forced a grin.

"Yes," she responded with a strange look. "Are you honest and above deceit?"

Jerry flinched inwardly. Was she hitting at him? Did she know how he had got his present job? But that was

impossible. He relapsed to silence, ate his meal hurriedly, and left.

Fixed Signals

BIG HAT had the front end of the 216 fixed to his satisfaction and was perched up on his seat, hat pulled so low over his brow that only the tip of his nose and the chin showed.

The train had to be switched and cut for the hill. Just as Jerry had feared, all of the switching was done on a left-hand curve, and the fireman found himself faced with catching signals. He tried squinting but that made his eyes water so badly he gave it up as a poor job.

Damned brakemen! If they'd only swing a signal a fellow could see. Lanterns looking like full moons criss-crossed with dark lines. How could a guy tell whether they were moving in a six-inch circle, an eight-inch "slow" sign, or a little stop signal?

Once when Jerry mistook a stop signal for a caution signal, they rammed into a cut of cars so hard the bell clanged and Big Hat scowled across the boiler at him.

"Keep a better eye on them signals!" he warned.

Thirty minutes of torture, of the fear he would cause damage or an accident. Then their train was made up and ready for the climb to Serene Summit. Two thirty-five ton engines on the head and Big Hat's 216 behind the caboose. Jerry was able to relax now.

Big Hat had worked some kind of miracle in the front end, so that the 216 burned her fire as perfectly as a fire can be made to burn under a forced draft.

At Serene Summit they set out the train they had brought and returned to Crystal for the balance. This was the ordinary course of procedure and was known among the rails as "doublin' th' hump."

Again Jerry had trouble in catching the signals correctly. Big Hat acted as though he were becoming suspicious, but made no comment, only chewed more rapidly on his eternal piece of willow.

Half a dozen times during the second trip Jerry was tempted to cross over and tell Big Hat about his eyes. But to do that would mean the loss of his job.

He had found something here on this narrow-gage pike he had never dreamed existed. There was a personal touch to it. Every man working here seemed to be a part owner in the Rainy River Line and equipment. Big Hat looked on the 216 as his personal property. Little engines and cars, but big, he-man railroading!

THEY got their train together at Serene Summit and the 216 was coupled on the head end. The other two engines went light ahead of them.

The brakes were carefully looked over by the trainmen, and there were no retainers to turn up with straight air. The conductor threw them a highball and Big Hat blasted off.

Jerry had been lucky at the summit. All of the switching had been done on the right side. Gray dawn was showing in the east as the train clanked forward, gathering momentum on the four per cent grade. The two regular brakemen and the swing man decorated the tops of the cars, pick handles in readiness.

Going down the mountain Jerry admired Big Hat more and more. The little engineer had closed the back door of the cab on his side and was leaning against it as comfortable as though at home in an easy chair.

His feet were cocked up on the throttle. His left hand was closed around the handle of his straight air valve. This valve looked much like a copper water faucet except that the handle was longer and notched to go only so far.

Willow waggling between his lips, ten-gallon hat pulled down until it rested on his ears, Big Hat let the train drop down the grade with not over a mile an hour change in speed at any spot.

Big Hat was every inch an engineer! Jerry gazed across at him all the way down the six-mile decent, envying him, wishing now that he hadn't hired the boomer to take the examination for him.

Fairview, the siding and telegraph station at the foot of the hill, nestled in a cupped hollow at the far end of a half-mile curve to the left. The depot sported a fixed semaphore signal which was set manually by the agent.

Just before Big Hat reached for his whistle cord to blow for Fairview, he glanced across at Jerry.

"Grab that signal in front of th' depot for me. We may be able to drill right through," he yelled.

Jerry leaned far out the window, eyes squinted. He could see the depot, a blur of red and some green trees down there, but anything as small as a fixed signal . . .

Big Hat, fidgeting on his seat, looked expectantly across at Jerry.

"It's right in front of th' depot!" he shouted shrilly.

Jerry knew he couldn't see that signal with any certainty until they were within a few hundred feet of it. And Big Hat wanted it now. Should he make a wild guess? He cursed the head brakeman under his breath for not being in the cab. Again he strained his eyes in an effort to see the signal. No use.

"Columbus took a chance," he muttered angrily. He pulled his head and shoulders into the cab. "It's clear!" he called across to Big Hat.

BIG HAT kicked off the brakes with a single movement. Then he blasted two derisive toots. The train lumbered over the stub switches of the siding and drummed past the depot.

Now that they were around the curve where he could see, Big Hat had leaped to his feet, throwing his brake valve to application position. A gesture flipped the long reverse lever in back motion and he cracked the throttle.

A single blast, short and choppy, set the three brakemen to winding up hand brakes. Jerry knew he'd made a rotten guess. As they roared past the depot he caught a glimpse of the signal, *set at stop!*

A quarter of a mile west of Fairview, Big Hat succeeded in halting his train. Standing up tiptoe so he could glare across the boiler at Jerry, he spat out his piece of willow and shrilled:

"Thought yuh said that signal was at clear!"

"My mistake," said Jerry.

Big Hat clamped his lips to a thin line. Then, opening his cab door, he dropped off and trotted back toward the depot where the agent waited for him with a handful of orders.

When Big Hat returned to the 216 a few minutes later he stepped into his side of the cab, carefully raised his seat

and climbed up on it, getting to his knees. After that he leaned across the boiler, tilted his hat and scratched through his sandy-colored hair.

"From th' way yuh been actin' around a' engine I took it yuh was familiar with railroadin'," he began in a high-pitched voice.

"I am."

"Worked around fixed signals some?"

"Three years."

"Then by th' eternal gods of war, why did yuh call that signal clear when it was set at stop?"

"I made a poor guess," Jerry admitted.

"What do yuh mean, 'guess'?" demanded Big Hat.

Jerry shrugged hopelessly. "I mean guess."

"Couldn't yuh see it?"

"No."

Big Hat relaxed. "Why didn't yuh tell me yuh couldn't find it?" he shrilled.

"If it had been as big as a barn, I couldn't have found it," the fireman said flatly.

Big Hat frowned. "Do yuh mean yuh can't see?"

"I mean just that."

"But damn it, yuh passed old Sawbones in Fruitvale!"

Jerry shook his head. "No, I hired a boomer to take that exam for me."

Big Hat fished out a piece of willow from his breast pocket, chewed it savagely for a few seconds, removed it from his mouth and studied it.

"I'm everlastingly an' eternally jiggered!" he exploded. "Why didn't yuh tell me yuh was blind as a bat?"

"Because I love the railroad, Big Hat. I lost out on the B. & Y. up in Canada because I couldn't see. I was called up for promotion."

"Why don't yuh get some spectacles?"

"The doctor told me glasses would not correct my sight. It will take time, but he said my eyes would get okay again."

A wide grin warped Big Hat's leathery cheeks. "Danged if yuh don't make me admire yuh, kid," he said. "Now that I know your ailment I c'n sort of look out fer yuh. Just forget it."

"You mean—" queried Jerry, hope leaping in his breast.

"I mean that only you an' me know about your eyes. An' that's as fer as it'll go. But you better keep a good eye on our assistant super, Bart Holden. He's hell bent on hundred per cent railroadin'."

The Rubberneck Wagons

TRUE to his promise, Big Hat looked out for Jerry from that time on. In long-distance switching the little engineer would run across to the left hand side, catch the signals and then return to his side and make the required moves.

Jerry continued eating at the Black Canyon Hotel, but business was so rushing he had little chance to talk with Marjorie Porter. For her part the girl remained politely aloof toward every railroader except Bart Holden.

Holden seemed to interest her. She generally had a smile for him. And the assistant super was making the best of it, spending most of his time around Crystal. Jerry realized that here was no mean rival.

In June, observation cars were placed

in service on passenger trains through the Black Canyon. The railroaders had appropriately named them "rubberneck wagons." They resembled coal cars, except that they were varnished and contained wooden seats. Ideal conveyances from which tourists could view the grandeur of the canyon. These cars were set out at Crystal, and one of them remained there every night, placed conveniently across the main line from the railroad eating-house.

Quite a number of the "rails" used these cars for sentimental reasons with the hashers during long, moonlit evenings.

By this time Jerry had been accepted as one of the gang. But for his eyes, which grew no better, he was happier than he had ever been before.

He was just climbing down from his engine one afternoon when a young fireman approached.

"Hi, Jerry," he greeted boisterously, "get into your best bib an' tucker right away. Th' company just give us permission to take th' rubberneck wagon an' a' engine, an' get a bunch to go to Fruitvale to th' carnival. Swing man will be train crew. We got an engineer an' fireman willin' to work fer nothin'. Get yourself a girl."

A wide grin covered Jerry's map. Here was opportunity! Maybe Violet Eyes would accompany him. But he must get in first bid.

Not stopping to clean up, he headed directly toward the hotel and entered. Holden was perched upon a stool at the lunch counter, talking to the waitress, who leaned on her dimpled elbows and bantered with him.

Jerry slid upon a stool at the far end. Holden glanced up. Marjorie said something to Holden and approached Jerry.

"Hello, Marjorie," greeted Jerry, eyes sparkling with sheer joy. "I'm looking for a girl to accompany me over to Fruitvale, and was wondering if you'd care to go?"

"I'd be glad to," she said.

Jerry leaped from his stool and executed a clumsy war dance. "Hooray!" he exploded. "I'll dash along and get dressed up. You be all ready when I get back, won't you?"

"I'll be ready," she laughed, cheeks flushed.

Holden was on his feet now. "Wait a minute," he interrupted. "I was just about to invite Miss Porter myself."

Jerry's eyes twinkled audaciously. He was not going to give up this chance to get better acquainted with Marjorie.

"I'm sorry, Mr. Holden," he said, "but all's fair—"

Holden frowned. "Aren't you the new fireman Roades just hired?"

"I am."

"Okay." Holden abruptly turned and clumped from the room.

JERRY found Marjorie waiting for him in the hotel. At sight of her he blinked. It was almost impossible to believe this pretty girl was an ordinary hasher. She was positively radiant.

To Jerry it seemed too good to be true. He was out with Marjorie at last, sitting close to her in the narrow seat, laughing and talking. Once or twice her golden hair blew into his face. The girl seemed getting a genuine pleasure from the adventure.

The trip to Fruitvale was just a starter. They rode the merry-go-round and the Ferris wheel, had their fortunes told, ate popcorn and drank pink lemonade until they could hold no more.

The gang wound up at a dance in the armory. Jerry danced time after time with Marjorie, thrilling to the touch of her body against his, laughing down into her bright eyes.

It was almost 3.00 A.M. before they started toward the depot to return to Crystal. Bart Holden had accompanied them, had cut in on Jerry many times during the dance, and seemed to be enjoying himself in spite of missing out on the date with Marjorie.

At the depot the engineer who had volunteered his services was wearing a worried look. He cornered Jerry where no one else would hear.

"That fireman of mine celebrated too damned well," he wailed. "Bill's so drunk he can't hit th' ground with his hat. It'll mean his job, but he's just a boomer. I got to have a fireman."

"I'll fire back for you," said Jerry, his face sobering.

Jerry returned to Marjorie. "There's always something to spoil a perfect time," he told her. "And this one is no exception. I've got to fire the engine back to Crystal."

"Fire the engine?" she repeated.

Jerry nodded. Then he brightened. "There's no reason why you can't ride in the cab with me. That is, if you want to," he added hopefully. "You'd be out of those cinders and coal dust—"

"And ruin my pretty dress," she laughed. "But I don't mind. An engine cab ride would be worth it. Come on." Marjorie was already walking toward the engine.

With the girl perched on the brakeman's seatbox and Jerry firing, they started back to Crystal. While they drummed up the hill little was said, owing to having to scream at the top of their lungs.

Jerry spent the time between fires gazing at Marjorie's back and the little roll of gold-bronze hair which lay on her white neck. No use trying to kid himself now. Jerry had fallen head over heels for her.

When they had tipped down the east side of Serene Hill, Jerry leaned over so he could speak in Marjorie's ear.

"I've had a great time, Violet Eyes," he began haltingly, "and I want to thank you for having gone with me."

"I've had a good time too, Jerry," she said with enthusiasm.

A wave of emotion surged over him. Almost unconsciously his lean hands gripped her shoulders, half turning her around. The questioning look in her large eyes seemed to set his blood on fire. Then she was in his arms. And his lips found hers—for just a second.

"I'm crazy over you," he whispered.

With a savage movement Marjorie tore herself free. Her right hand came up, striking him across the cheek with a loud smack. Jerry saw the smirking face of the engineer above the boiler.

"You—you—" she panted, eyes blazing with scorn. "You take too much for granted, Mr. Morgan."

"I'm sorry. I lost my head," Jerry apologized.

She turned her back on him, sitting perfectly erect on the brakeman's seat and gazing straight ahead.

Holden Is Suspicious

JERRY silently helped Marjorie from the engine on their arrival at Crystal. He called "good-by" as they

parted, but the girl went away without a word, cold and unbending.

Jerry knew he'd been a fool. And yet he was not really sorry. Marjorie had stirred his imagination. He wanted her. If only there were some way he could make her care!

The next day Holden came across to the roundhouse just before Big Hat and he were getting out. Jerry was on the ground working with his ashpan slides. He straightened when the assistant super stepped up.

"You sure beat me to it yesterday, Morgan," the official declared. "No hard feelings, but just wanted to tell you I'm going to go the limit to beat your time."

Holden did not wait for an answer but strode off. Jerry stood looking after him, a grim look of defiance and bitterness on his face.

When the freight train they were to help pulled out of the canyon, the 216 was coupled on the rear end to switch. Holden was on the ground watching the work being done.

Again Jerry was having trouble with the signals, and Big Hat was racing from his side across the deck to catch them between each move.

Holden watched the procedure for some time in silence. Finally when they halted for a few minutes he stepped below the cab and looked up.

"You seem to have trouble catching the signals, Morgan," he shouted.

"Haven't quite learned them all," replied Jerry uneasily.

Holden grunted. Then he pointed ahead where a brakeman was standing in the shadow between two cars giving some kind of signal. Exactly what the signal was Jerry couldn't tell. He knew the brakeman's hands were moving, but whether in a "back up" or "come ahead" was doubtful.

"He's giving you a signal," said Holden.

Big Hat crossed the gangway to see what was going on. He caught the signal almost the same time as Holden.

"He wants me to pull ahead," squeaked Big Hat. Then to Holden: "My fireboy ain't learned all he knows about signals yet."

Holden wore a peculiar expression as he turned abruptly and walked away.

That was the last move they made before pulling the train back to the main line so the head engines could couple in. Shortly after that they started up the hill.

THEY were being followed by No. 1, westbound passenger train, and they thundered rapidly up the four per cent grade with a light train. A mile and a half from Crystal, Jerry was riding with his head out the window to catch a cool breath of air. He saw a box car near the center of the train suddenly sway far out on his side, bounce viciously a few feet, then turn completely over.

Big Hat was working the 216 with an open throttle, reverse lever halfway down on the quadrant. The little engine bunched the slack and slammed the balance of the train into the box car, making kindling wood out of it. The train line broke, leaving the straight air brakes fully released.

"Stop 'em, quick!" shouted Jerry.

Big Hat smashed his throttle closed. The rear brakeman dropped from the caboose with a red flag and raced back past the 216 to flag Train No. 1. The swing man, excited over the accident, dashed out the front door of the caboose without a brake club and lumbered along the side of the train.

With a vicious lunge the train re-

maining on the rails between the wrecked car and the 216 rolled back. It crashed into the 216. Dust flew from the caboose.

Sensing what was taking place, Jerry leaped down in the gangway and snatched up his coal pick. A single rap dislodged the head. Armed with this, Jerry was out through the front cab window, over the top of the caboose and tugging at the hand brake on the first car.

Below, he heard brake shoes jump up and down on the wheels which were rapidly gaining speed. Big Hat whistled for hand brakes. As soon as the first car was tied down as much as possible, Jerry raced for the next. Big Hat was working steam, trying to hold the train.

For almost a hundred yards it was an even gamble as to whether Jerry would get them checked. Then under the dogged restraint of the hand brakes he had set they slowed to a walk, then clattered to a halt.

Jerry mopped beads of sweat from his forehead and, carrying his makeshift brake club, returned to the engine.

"That was right nice work!" commended Big Hat.

Jerry smiled at the compliment. He replaced the head on the coal pick handle, and crawled up in the cab.

With the aid of a couple of ties the wreckage of the car was shoved to clear the main line. The train continued with No. 1 rumbling close behind, and some thirty minutes late.

AS days drew into weeks, Jerry knew Bart Holden was becoming more and more suspicious of his eyesight. The assistant super invariably turned up on the job when the 216 was switching where Jerry must catch signals.

"Seems to take you a long time to learn signals, Morgan," the official said one day.

"I always was sort of slow," drawled Jerry good-humoredly, but in his heart was the chilling fear that soon Holden would discover his weakness.

Knowing Holden's ideas about railroading, the sequel was not hard to imagine. It was going to be hard to leave this little iron pike, and Big Hat, and the rest of the boys who had accepted him as one of them.

Marjorie remained a question mark to Jerry. She had not forgotten that presumptuous kiss, and was deliberately cool toward him. Since the night they had gone to the carnival, Jerry had been unable to see her alone.

Meanwhile Holden was making strides in his suit. Several times Jerry saw him and Marjorie walking down the track together, deep in conversation.

Occasionally eastbound freight trains were doubleheaded from Crystal to Gilson, east terminal of the Canyon Division. For over a month Jerry didn't catch one of these trips. Then he was called to doublehead with Big Hat on the 216.

Jerry had polished his headlight that day and trimmed the wick. They left Crystal at 7.50, the 216 on the head end, and rolled down the mile and a half of three per cent grade, swaying around the sharper curves with howling flanges.

A quarter of a mile before they reached the end of the down grade both engineers began working steam. The train was traveling almost thirty miles an hour when it rattled over the switch at Canyon spur.

By this time darkness had settled down, so the headlight of the 216

Jerry Went over the Top of the Caboose Armed with the Handle of the Coal Pick

burned an orange patch some fifty feet ahead. Big Hat was just a shadow on his side of the cab.

The head brakeman was back in the caboose, where the train crew were having their supper.

Someone came clambering over the coal pile on the 216. Jerry straightened from putting in a fire. Holden let himself down over the coal gates, brushed past, and stepped up in the fireman's side. Jerry closed his firedoor and followed.

"I figured we'd better have someone up here who could see rocks if any were down," said Holden pointedly.

"Thanks," was Jerry's answer: "it'll give me more time to watch the fire."

Seven of the fifteen miles comprising the Black Canyon were passed without event. Holden, sitting on the brakeman's seat, began to nod. Seeing this, Jerry spent more time on his side, head out of the window.

Suddenly something white loomed up between the rails about a hundred feet away. They were rounding a left hand curve. Jerry brushed his hands across his eyes and looked again. The object was still there. It looked like a rock, and there was no use taking chances.

"Rocks, Big Hat!" he shouted.

HOLDEN jerked his body up and peered through the front window. Big Hat shut off and set the

straight air brakes. The train ground to a halt with the pilot of the 216 almost against the white object.

Holden had been yelling something while they were halting, but nobody had paid any attention to him. Now he glared at Jerry.

"You don't seem to know a rock from a newspaper, Morgan!" he accused.

Jerry flushed. He could see it now, an open newspaper across the center of the track.

"Better safe than sorry, Mr. Holden," he retorted.

"And it's poor practice for a man who can't see to be trying to railroad," persisted Holden.

Jerry opened his lips to offer an excuse, but was interrupted.

"No fightin' on duty," squeaked Big Hat, on his knees on his seat and leaning half across the boiler. "Jerry done just exactly right. If it had been a rock an' we'd hit it, we'd be in th' river now."

"You win, Kennedy," said Holden soberly. He dropped back on the brakeman's seat box, eyes ahead.

The train ripped through Sapinero, at the east end of the canyon. The board in front of the depot was at clear. Holden remained slumped down until they had left the town a couple of miles behind. Then he got to his feet.

They were bowling along a stretch of straight track now. At the far end Jerry could see a white milepost, but it was badly blurred.

Holden turned to face him. Pointing toward the milepost, he shouted:

"What's the number on that post, Morgan?"

Jerry squinted. He could see a black blur that was a number, but couldn't tell what the figures were.

"Can't you see it?" he countered.

"Yes, I can see it, and want to know if you can."

"Well, I can." Jerry was sparring for time, waiting until they were close enough so he could see it with certainty.

"What is it?" demanded Holden.

"Since you know, why ask me?" Jerry turned his back on the official and dropped down in the gangway where he took enough time in putting in a fire to make sure they had passed the milepost.

But in the cab Holden was waiting for him. On his face was an expression Jerry could not fathom. The assistant super was up against a mighty tough problem.

"Morgan," he began, "you've put me in a hell of a spot. Personally I've nothing against you. We're both playing for the same girl. May the best man win. But you know my reputation regarding the railroaders working under me. I'm convinced your eyes are not right. When we arrive in Gilson, report to the company doctor. If you get past him, okay. I'm hoping you do."

Jerry nodded unhappily, turned and went back to his firing.

The Ax Falls

DURING the balance of the trip the 216 seemed to keep saying to Jerry: "You're done, Jerry, you're done, Jerry—" over and over again.

There was no way out. He could not pass the eye examination, and Holden would see that he took it.

They pulled into the Gilson yards at

6 30 A.M. Big Hat had spoken no word since they had stopped for the newspaper across the rails. When he halted the 216 over the cinder pit at the roundhouse he dropped his hinged seat and fished his coat from the box on the wing of the tender.

"We'll have time to eat before we go back to Crystal," he called across to Jerry.

Jerry agreed. He was not hungry, although he had worked all night.

"I heard Holden talkin' to yuh this side of Sapinero," said Big Hat. "What was he sayin'?"

"He ordered an eye examination," Jerry answered glumly.

Big Hat slipped into his coat, crossed the gangway and stood in the door of the cab on Jerry's side. "So he found out about your eyes?"

"Just about. I'm to pass the doc before I return to Crystal."

The caller came running up to the 216 and peered at the pair on the left side of the cab. "A message fer Jerry Morgan, fireman," he announced.

"I'm Jerry Morgan, bub."

Jerry reached down and took a slip of paper from the caller, who said:

"You fellers will return light to Crystal as quick as yuh get through eatin'."

"Okay," responded Big Hat. Jerry was reading the message.

Jerry Morgan, fireman. You will report to company doctor before leaving Gilson and pass a satisfactory eye examination. Failure to do this will automatically bar you from engine or train service with this railroad.

B. HOLDEN, Ass't Supt.

Jerry grunted as he finished and handed the sad news to Big Hat. The hogger read it quietly, then pulled out a piece of willow and began chewing rapidly on it.

"Let's go eat, anyhow," Big Hat finally said, without removing the willow.

He led the way toward town. As they were passing the dispatcher's office Holden came out the door. He gave Jerry a perfunctory greeting and was about to pass on.

"Just a minute, Mr. Holden," injected Big Hat, voice higher pitched than usual. "I want a word with yuh. Maybe yuh don't know how my fireman saved a nasty wreck on Serene Hill th' other day. He was th' only one with brains enough to grab a brake club an' stop 'em when we started down th' mountain against Number One."

"Kennedy," said Holden, face drawn with worry, "rules of this railroad require that every man in train and engine service pass a physical examination. It's a necessary safety measure. You know that. I've told Morgan to bring me a clear bill of health from the company doctor. That's all."

Big Hat flamed with anger, clenching his fist. But Jerry grasped the hogger by the left arm and was pulling him away.

"Come on, Big Hat!" he said. "No use of your taking chances with your job. I'm young and can find something else to do."

The two men ate in silence. Sight of food had brought back Jerry's appetite and he enjoyed every bite of it, even though the ax hung above his head.

The meal over, Big Hat leaned back with a sigh. "An' now to th' slaughter, huh?"

Jerry shook his head. "No use, Big Hat. I can't get past the doctor. I'll just return to Crystal, get my things together and hunt a new place to work.

I just can't stay here unless they keep me in engine service."

Big Hat scratched through his hair. "It's a danged shame!" he blazed. "An' nothin' we can do about it, either. I see what you're up against. Since yuh ain't gonna be able to pass th' examination, no use takin' it. We'll just get back to th' roundhouse, climb on th' Two sixteen an' highball fer Crystal with you firin' your last trip fer me."

THE 216 was turned and ready to head back to Crystal when Jerry and Big Hat drew up beside her. A well-dressed man, smoking at a chewed-up cigar, stood near the cab. When he saw Big Hat his face wreathed in a grin and he advanced.

"Hello, Giant!" he greeted boisterously. "How's tricks?"

"Fair enough, Mr. Marsh," replied Big Hat, then introduced: "Mr. Marsh, this is my fireman, Jerry Morgan. Mr. Marsh is master mechanic."

Jerry returned the introduction.

"Big Hat," smiled Mr. Marsh, "I got good news for you. You're up for a turn on passenger out of here. Want to take it?"

Big Hat pondered a few seconds. "Might as well," he agreed tonelessly. "What's th' occasion?"

"New business. I've got to dig up some more engineers, too." His eyes bored into Jerry. "How about you, Morgan? Think you could hold down the right hand side of a cab?"

"I was up for promotion to engineer on the B. & Y. when I quit there," said Jerry quietly.

Mr. Marsh slapped his thigh. "I was just joking when I asked, but if that's the case, I can sure move you over to the right side. And since you've been firing for Big Hat Kennedy I know you'll make a cracking good engineer. If Big Hat takes the passenger I'll turn over the Two sixteen to you."

Jerry's heart had leaped with high hope at the words of the M. M., but now realization swept over him again. Mr. Marsh must be unaware of Jerry's weak eyes.

"I'll let yuh know definitely about takin' passenger, Mr. Marsh," said Big Hat, starting to climb on his engine.

"I'll be waiting for that word. And I'll probably call you up for promotion in the next few days, Morgan," he informed Jerry.

Big Hat received his orders and they left Gilson with no further trouble. But Jerry knew that his arrival in Crystal would find plenty waiting for him.

He was not wrong. Almost before the 216 halted in front of the depot so Big Hat could register, the agent came out with a message. He handed it up to Jerry in silence. Jerry knew the contents of the note, but opened it and read:

You are hereby pulled out of service until you have passed a satisfactory eye examination.

B. HOLDEN, Ass't Supt.

Jerry passed the message across to Big Hat, who perused it without comment. Then Big Hat dropped to the platform and entered the depot. Jerry fished his coat from the box set on the wing of the tender and slowly drew it on.

Big Hat came back to his engine and climbed in the cab. The 216 chuffed slowly toward the roundhouse. Not until she was stopped near the cinder pit did Big Hat say a word. Then the little man held out his right hand, which Jerry grasped warmly.

"I'm sorry, Jerry," said Big Hat.

Jerry swallowed the lump that came into his throat. Big Hat had touched him deeply with his simple action and words. It would be a real pang to part from the engineer.

The Runaway Engine

DOG tired, Jerry walked slowly across to the Black Canyon Hotel and entered. Marjorie was sitting behind the lunch counter. She looked up and her face brightened at the sight of him.

"Hello," she greeted. The waitress rose to her feet and leaned on the counter, regarding him appraisingly. "A bunch of us are going for a beefsteak fry up the river this evening. Would you care to go along?"

Jerry could hardly believe his ears. This girl was asking him to accompany her on a picnic! Maybe she was going to forget the night of the carnival.

"You'll never know how you've sort of bolstered me up, Marjorie," he said slowly. "I appreciate your asking me, but I'll have to tell you how I stand. My job as fireman here is gone."

"Fired?" she questioned.

His head bobbed miserably.

"But why?"

"I got the job under a fraud. You see, my eyes are on the bum."

"I didn't know—" Her voice was close to tears.

"And the railroad is in my blood," he went on doggedly.

"But there must be something you can do." Her right hand rested on Jerry's arm now, and he thrilled to its touch.

The ex-fireman shook his head, sat silent for a few seconds, then tonelessly ordered food.

The meal over, he headed toward his room where, after cleaning up, he tumbled into bed. But sleep would not come.

"It's hell how a job of railroading can get under a fellow's hide," he sighed two hours later and sat up.

But it wasn't only railroading. His engine service out of Crystal was colored with the violet of two lovely eyes and the gold bronze of a shimmering head of hair he wanted to run his hands through.

The disconsolate young man heard No. 1's engine panting near the depot after her run through the canyon. He pulled on his clothes and went down, drawn by the sound and the throb of the iron pike.

No. 1, helped by two little hill engines, pulled away from the depot just as Jerry came up. He watched them out of sight in the adobe cut above the yard limit board. Then, because he had nothing else to do, he walked into the hotel.

Holden had come in on No. 1. He was perched on a stool at the lunch counter, gazing at Marjorie. Seeing Jerry, the official slid from his stool and asked:

"You got my message, Morgan?"

"I did," was the reply, "and I ignored it because there was no use wasting the doctor's time."

The assistant super regarded this as insolence, and said so.

"I checked on you before your last trip," Holden went on, his temper rising. "The company doctor in Fruitvale told me the man passing the physical examination under the name of Jerry Morgan was heavy-set, dark-complected, black-eyed and had a scar

across his right cheek. You've none of those characteristics! You hired out here under the rankest fraud I ever heard of!"

He glared at Jerry, who responded quietly:

"What of it?"

"What of it?" retorted Holden. "Simply that you've jeopardized the lives of every man you've worked with through your inability to see! Why, you can't even read that placard over there!" He pointed to the far wall.

"You're right, Mr. Holden, I can't." Jerry spoke sadly. "I wish I could! You see, I'm a railroader and always will be. Maybe some day these eyes of mine will correct themselves—"

For a long minute Holden looked fixedly at the fireman. Then his shoulders drooped. "Damme, Morgan," he exclaimed, "I'm sorry to lose you! If you'd take some other job—"

"There is none I want except engine service."

Jerry switched his gaze to Marjorie, who was regarding him with an unfathomable expression in her beautiful eyes. He remembered her words of that night. "Are you honest and above deceit?" He couldn't tell whether her expression was one of contempt, sorrow, or sympathy. Without another syllable he wheeled and walked outside.

SICK at heart, Jerry wandered over to the grocery store. This was a hang-out for the "rails" when they were not working, and half a dozen of them were sitting on the edge of the high porch, feet dangling in space.

"Hear yuh got th' well known sack, Morgan?" said a switchman.

"I did," acknowledged Jerry.

The switchman chuckled. "Richest thing I ever heard—hirin' a boomer to take th' exam fer yuh. Old Man Holden is plenty mad about it."

Jerry smiled mirthlessly as he climbed up and seated himself. "Yeah, I guess he is."

"We sure hate to see yuh leave," remarked one of the mechanics. "Just when th' company is settin' up some more hoggers."

"I hate to go," said Jerry.

He sat there almost an hour, then got to his feet and headed back toward the depot, drawn by the iron trail. The 216—his engine no longer—was sitting on the sandhouse track. The 210 sat a short distance ahead of her. Both were headed east.

The hostler helper was walking toward the lower stub switch leading to the main line and the canyon. Jerry saw him stoop over and throw the switch, then amble slowly back toward the 210.

Holden, accompanied by Marjorie and another of the waitresses, came from the eating-house and moved toward the 210. It gave Jerry a pang to see them. Holden would have a clear board with Violet Eyes from now on.

Jerry went into the depot. Hanging on a hook was a message regarding east- and west-bound trains for the day. Through force of habit he read the line-up:

Number One running in two sections. Second section arriving in Crystal about three twenty p.m. carrying convention of Elks. Arrange two helpers for this train.

Jerry absorbed the information and pulled out his watch. It was 3.00 P.M. Second No. 1 would pull in during the next twenty minutes.

He wandered aimlessly outside, eyes unconsciously drawn toward the roundhouse. Marjorie and the other

girl were up in the left side of the cab of the 210. Holden had just gone into the roundhouse foreman's office. Neither the hostler nor his helper were in evidence.

Suddenly the 210 moved off, down the spur leading to the main line and the canyon. Jerry could see the red switch target below, showing that the stub switch was lined for the roundhouse spur.

"Hostler's probably getting the Two-ten ready to help Second One," decided Jerry.

At that instant a piercing scream rang out. Jerry caught a glimpse of Marjorie's white face and burnished hair outlined against the darkness of the cab.

The hostler helper came dashing from the roundhouse wildly waving his arms and yelling:

"She's walked off!"

JERRY grasped the situation in a split second. Because of a faulty throttle, the 210 had moved off on a wild pilgrimage, carrying along the two waitresses. On the heavy grade between Crystal and Canyon Spur the little jack would gain a terrific speed. Neither of the girls would know how to halt the wild run. And Second No. 1 was due in Crystal almost at this instant!

Jerry acted. A single leap carried him across the main line. A half dozen more and he was pulling himself into the cab of the 216.

As his hand reached for the throttle to jerk it open, he saw Holden come dashing from the foreman's office, waving his arms and shouting something. The official tripped over a rail and fell face first in the cinders.

With the snap of closing cylinder cocks the 216 leaped forward, rocked dangerously as she climbed over the chains thrown under her drive wheels to keep her from running away, and weaved and rolled down the roundhouse spur, three hundred feet behind the 210.

The 210 was now moving at well over twenty-five miles an hour.

Jerry was thinking faster than he had ever thought before in his life. He knew he must catch the runaway engine.

To catch her he must couple into her with the long tongue which was fastened on the front of the pilot of the 216, drop a pin through the link, then return to the cab and halt.

All of this must be done before they smashed into Second No. 1. Then Second No. 1 must be flagged—if there still remained time!

Jerry breathed a prayer for the safety of the two girls, especially Violet Eyes, as he started the air pump. Then he leaned far out the window of the 216, hand on the throttle, wooing the little mill to her utmost speed.

The 216 swayed over the stub switch leading to the main line so viciously that Jerry feared she would turn over. The first curve in the canyon gripped her drivers and she rounded it in a series of jerks. The side-rods on the thirty-inch drivers began moving like the shuttle on a sewing machine.

Jerry hoped she wouldn't throw a side-rod, but didn't check her wild plunge. As the 216 straightened on a fifty-foot tangent he caught a glimpse of the 210 weaving around a curve ahead.

The two girls, blurs of white against the black gangway, seemed to be motioning him to more speed. He had the reverse lever hooked up to center.

The 216 ripped across the high bridge a half mile below Crystal, steel

girders clanging on the understructure. Then down another stretch of tangent like a captive meteor.

Jerry had his front cab door unhooked so he could get out on the pilot when he finally caught the 210. At the far end of the tangent swayed the runaway engine, tender shimmying, coal dust flying from it.

Jerry knew the ordeal the two cab riders faced. There was no air on the 210. Even though they had closed her throttle, the grade would keep her speed far out of control. And he was sure neither of the girls would reverse her and then open the throttle. Only a person familiar with engines would have done that.

Gambling With Death

A MILE below Crystal was a rocky point, almost a thousand feet above the river. The track there was on one of the sharpest curves in the entire canyon. By the time the 216 roared up to the point she was less than a hundred feet behind the 210, and gaining rapidly. Any second now the 210 might smash into Second No. 1

There was nothing Jerry could do in the cab, so he stepped out on the running board. It was ticklish business, clinging to his narrow perch against the violent rolling and swaying of his engine, but he managed to worm his way along an inch at a time.

The engine swayed far out to the left, so far the drivers on the right-hand side lifted from the rails.

Jerry twisted burning eyes ahead. Twenty feet away roared the 210, listed far to the left, weaving drunkenly and apparently ready to turn over.

The swaying of the 216 jerked Jerry's feet from under him. He found himself clinging by his hands with nothing between him and the jagged cliff!

It seemed an age that he hung thus, struggling to get his feet back to the running board. Then the 216 straightened up with a resounding crash of drive wheels as they came back on the rails.

Ten feet ahead plunged the 210. Jerry crawled out on the pilot on hands and knees. He let himself down on the pilot step, reaching below for the tongue which would couple to the 210.

It was heavy, this clumsy steel, and blobs of sweat stood out on his face as he lifted it, aiming it at the narrow slot on the rear of the 210 into which it must be guided.

Tongue held in readiness, he jerked his eyes to the pilot of his engine. A single pin swayed and rolled back and forth between two protruding nuts.

Five feet, four, then three. Jerry was holding his breath now, every fiber of his body centered on that gaping slot in the casting on the rear of the 210's tender.

Less than a foot. Then it seemed the 216 made a last effort and the link on the end of the tongue slipped from sight in the casting.

Jerry snatched up the pin and dropped it home.

Then he straightened up, sweat trickling down into his eyes. He blinked it away and squinted ahead. No sight of Second No. 1. It was late on its schedule.

Like a flash he was back over the steambox, on the running board and

Ten Feet Ahead of Him the Runaway 210 Raced down the Hill

into the cab. His body half through the door, the 216 struck an uneven piece of track. She rolled so violently Jerry was thrown against the throttle. It knocked the wind from his body and the pain was so great he almost cried out.

Fighting for breath, he smashed the throttle home, pulled the reverse lever to back motion and applied his straight air. Doggedly the 216 fought the 210 to a complaining halt.

Breath coming in gasps and feeling as though flames were searing his right side, Jerry snatched a red flag from the shelf overhead. Before they had drawn to a full halt he was on the ground racing forward.

The whole canyon seemed to spin around him as he staggered down the track. Every breath was a torture. He reached up and grabbed a handful of flesh where the pain was, then groaned at the extreme agony it caused him.

How far he staggered he did not know. Second No. 1, approaching him, seemed like some kind of a nightmare. But he had presence of mind to wave his red flag across the track.

It seemed an age before he was answered. The locomotive pulling the special drew up and halted, her pilot almost against Jerry's legs. The engineer dropped down and came running toward him.

"Engine ran away. I caught her. She's standing other side of that curve—"

Then the whole world went black and the ex-fireman knew no more.

JERRY opened his eyes to the dull rumble of wheels and the blasting exhaust of a locomotive. His head was pillowed on something soft and warm, something that seemed to cause fire to flow through his veins.

He looked up into the violet eyes of Marjorie Porter. They were tender now, and brimming with tears. The girl smiled down at him. When he started to speak she placed her fingers over his lips.

"Doctor says you mustn't talk, Jerry," she said gently. "You have some broken ribs. Just lie quietly. It was a wonderful thing you did, dear, catching that runaway engine!"

Unconsciously she had used the word "dear." Jerry would remember it until his dying day. But the pain in his chest burned like a red-hot iron. Well, it was worth it. ". . . a wonderful thing you did, dear." Jerry closed his eyes.

At Crystal, to the admiring gaze of the entire population, he was removed from Second No. 1. The company had ordered a locomotive and a caboose to rush him to Gilson to the hospital.

His body bound tightly, Jerry was forced to lie flat on his back for many days. They were days of torture and suffering. He wondered what would happen when he was on his feet again.

At the end of two weeks the superintendent came into the ward one afternoon. He shook hands with Jerry and sat down beside the bed.

"The company appreciates what you have done, Morgan," he began.

Jerry grinned weakly.

"We are going to offer you a position where you won't have to pass an eye examination," the official went on.

"You mean—" asked Jerry.

"I mean a job in the offices here. As my clerk, if you can qualify."

"I appreciate your offer," said the injured man, "but my whole heart and soul is on the main line, around engines. I love the work, the excitement, the men—"

"But your eyes won't let you work in engine service unless they can be corrected with glasses," the superintendent reminded him in a low voice.

"And they can't be corrected with glasses," said Jerry sadly.

The super shook his head. "If you could pass the doctor you'd return to engine service whenever you wanted to. In fact, you were to be promoted to engineer when you were injured. We've written the B. & Y. Railroad in Canada for your records. We know why you lost out there. That couldn't be counted against you. Having worked three years as a fireman would entitle you to promotion here—if it weren't for your eyes."

"I know—"

"You think it over. I'll be back to see you again in the next ten days. Good luck!" The superintendent got to his feet, shook hands, and walked out.

Jerry lay there gazing steadily across the long ward at a Rainy River Line calendar which hung on the far wall. He had been spending his waking hours gazing at that same calendar.

At first it had been a patch of white blurred with markings of black across it. Now he could make out the larger letters on it. He had been afraid to hope his eyes were getting better, but something was happening to them. Perhaps his enforced idleness, being away from the glare of a firebox . . .

AT the end of the third week Jerry was able to sit up a few hours during the day. And there was little doubt about his eyes now. He was able to read the figures on the calendar and they did not blur.

The morning he was to be discharged from the hospital, Bart Holden came into the ward. Jerry had just finished dressing.

" Morgan, I'm glad to see you back on your feet," said the official.

" Same here," admitted Jerry.

Holden seemed ill at ease, as though something bothered him. He scowled at a far wall for a few minutes in silence. Then, as though making up his mind, faced Jerry, eyes boring into those of the ex-fireman.

" If you're ready we'll cross to the doctor's office where you can take a physical examination," he rumbled at last. " Fact is, you're too damned good a man to lose off this narrow-gage pike. Couldn't you—er—consider a job outside of engine service?"

" I'll tell you after the exam." Jerry's heart was singing with happiness. This time he knew he would have no trouble.

The doctor, a pleasant-faced old fellow, greeted them pleasantly.

" According to Mr. Holden," he smiled, " you're bound and determined on going back into engine service, Mr. Morgan."

" Yes, sir, I am."

The doctor's right eyelid fluttered in a shadowy wink. Holden had twisted his felt hat into a ball, while his knuckles stood out white on the fists. He was laboring under a deep emotion.

The medical examiner stepped across to a chart which hung on the wall. " Now to pass the eye examination, you've got to read this line." He pointed to one near the bottom. " I have a little private business with Mr. Holden and we're going to step in the other room. You might study the chart while we're gone."

" Yeah, so you can read that line forward and backward," put in Holden, bluntly.

Jerry's eyes were shining. He faced the assistant super. " Just a minute," he said. " I appreciate what you want to do for me. But I can read not only the required line, but the one below it! *My eyes have become normal while I was laid up in the hospital!*"

" I've heard of like cases," beamed the doctor, with a sigh of relief. " Let's hear you read 'em."

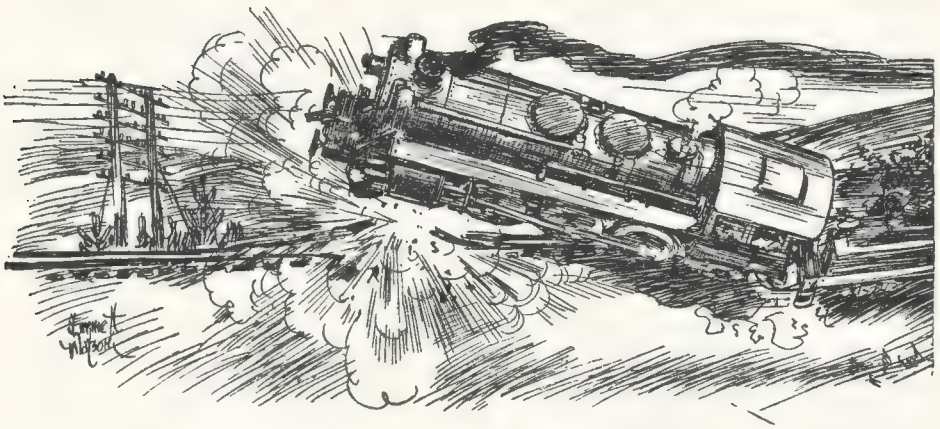
Jerry read them. Those tiny letters were as clear as a locomotive headlight on a dark night.

When he had finished Holden thrust out his right hand, which Jerry gripped warmly.

" Morgan," said the official soberly, " you've lifted a real load off my shoulders. And I'm glad, damned glad. Tomorrow you take the examination for engineer. Big Hat Kennedy is signing up for that passenger turn and you'll get his Two-sixteen. He said to tell you to handle her gently, mix a little beeswax and paraffin in your valve oil."

Jerry nodded happily. But most of all he was thinking of a certain hasher with violet eyes and golden bronze hair.

Most Astounding Case in Railroad History!



The Train Wrecker Who Terrified Europe

By ZETA ROTHSCHILD

THROUGH the black, moonless night of September 12, 1931, central Europe's most luxurious international express thundered on its way from Budapest to Germany. The train roared past the sleeping town of Torbagy, Hungary, its whistles muffled lest the sleeping passengers be disturbed. Beyond the town the train rolled toward a viaduct, the highest in all Europe, its steel frame two hundred feet above the valley below.

Steadily the engineer eased his engine onto the glistening rails of the bridge. But his train was not destined to reach solid earth again. Less than sixty feet out on the viaduct came a blast, a roar coupled with spires of flame, and the engine toppled off the viaduct, dragging down its coaches.

Eight cars, in all, fell a distance equal to the height of a fifteen story building. The engine and the first three crashed with such force that they dug a crater in the earth. The cars telescoped into a pyramid of wreckage.

The coupling between the third and fourth cars snapped, but the pull of the derailed section was too much for the rest of the train. And five more cars slid, and tumbled, somersaulting off the rails to the ground below. All were filled with human beings.

From the last car to go over a man catapulted and had the good fortune to be thrown, not into the path of the descending carriages or atop the writhing mass below, but some few feet to one side into an oasis of low bushes.

Stunned, bruised, teeth out and arm broken, Count Paulffy-Daun raced

As the Fiend Pulled on the Wires, the Dynamite-Filled Pipes Exploded and Threw Engines and Coaches Down the Bank

back on foot to Torbagy, and knocking on doors of the sleeping inhabitants, told of the catastrophe at the viaduct.

This, the most ghastly wreck in European railroad history, was destined to stand out not only for its long list of dead and crippled, but also as evidence of one of the most curious manifestations of perverted mentality in history.

All through the night the rescue crews worked. Farmers from the neighborhood came with carts filled with hay to carry back the injured to the Torbagy hospital. The first to arrive labored in the dark. But around two A.M. a flock of automobiles, bringing the curious who had heard the news in the night clubs of Budapest formed a semicircle around the wreck, their headlights turned on it. In this glow the dead and dying were recovered from the wreckage to await the special train from Budapest.

In the morning a score of detectives

and railroad officials ventured out on the viaduct to examine the section on which the train had been derailed. They had assumed a boiler explosion had been the cause of the accident; but now, to their surprise, they discovered that the explosion had not taken place within the engine, but on the bridge!

The rails were twisted and torn, and the bed of the tracks so blown up that it was obvious that only a charge of dynamite could have brought about such havoc.

There was nothing more to be learned from conditions above; but it was possible, suggested a detective, that parts of the infernal mechanism had fallen through the rails to the ravine beneath. It was a good hunch. For while engine and carriages had toppled to earth a few feet west of the tracks from which they fell, in the soft earth below the investigators found the remains of the infernal machine which had brought about the death of more than fifty persons.

Scraps of wire bound with tape were carefully picked up, also two cracked pocket batteries, a broken yardstick, a lock that looked as if it had been torn from a suitcase were nearby. And to the satisfaction of all, in the deep grass they came across two sticks of dynamite, still in their original wrappers, on which the name of the manufacturer could be read at a glance. Of course, these two sticks had not been part of the infernal machine; possibly they had escaped from the wrecker's grasp and fallen through the railroad ties.

A search of the land approaching the viaduct brought forth another fortunate find: a large poster held firmly under a stone. Printed on it in large letters was a message in Hungarian:

Workers; you have no rights, say the capitalists. We will show them; every month they shall hear from us. If the capitalist state cannot provide work for us, we shall make it for ourselves. Do not worry. Our supply of petrol and explosives is not running low.

The Translator

Logically enough, as a result of this flaunt, it was taken for granted that a member of some radical organization was responsible for the wreck.

WHILE the Budapest and Vienna reporters concentrated on finding the guilty radical, and some detectives too, a larger number of the latter began a systematic, intense and persistent search that was eventually to unearth, not a radical, but a God-fearing, conservative man.

First of all, no word about the finding of the two sticks of dynamite in the ravine had been given out to the newspapers, lest the train wrecker learn of this loss and take steps to shield himself.

On the wrapper had been printed the name of a Wollersdorf, Austria, firm. Calling in Vienna detectives to cooperate with them, two agents from Budapest descended on the manufacturer whose dynamite had evidently been used to blow up the express.

The owners of the factory were appalled. They willingly opened their books to the detectives, who made a list of all who had recently bought any of this particular grade of dynamite.

The majority were reputable firms, steady and legitimate customers of the explosive company. And on being questioned, every one of them was able to account for their purchases. Nor, the detectives learned, had any of these firms lost any sticks by theft.

This inquiry had covered all those who had purchased dynamite in September and August, and failure to find any clue from this list was a great dis-

This Photo Was Taken at Torbagy Viaduct on the Morning of September 13, 1931, after Eight Cars and a Locomotive Catapulted into the Valley from the Bridge

appointment. But since those two sticks of dynamite were their only connecting link with the train wrecker, the detectives decided to continue, extending the investigation to cover the purchasers of dynamite in June, May and back until they got some results.

It was a long-drawn-out job, and a monotonous one. The Torbagy wreck took place the second week in Septem-

ber; not until the detectives were making the rounds of those who had bought dynamite in May did they come across a lead.

On the 20th of that month a man had asked for a hundred sticks of dynamite of the grade used for quarrying. Signing for them, he had explained they were to be used at a Tattendorf quarry which regularly bought dynamite from the Wollersdorf firm.

But a visit to this quarry brought out the astonishing information that owing to poor business operations had been suspended for almost six months. And to convince the detectives no dynamite had been bought, the owner let them examine his ledgers. He could not make any suggestions as to who had used his name, and he could not add more except that the man had taken away the box himself.

Who was this man? This question was soon answered by a third party.

Shortly after the wreck the Budapest authorities offered a reward of 50,000 *pengo* (about $8,500) for information leading to the identification of the man responsible for the catastrophe. More than 250 persons answered in the first week after the announcement. They thought they knew something worth passing on. While nine-tenths of this correspondence eventually proved of little value, in the remaining fraction were isolated items which did provide clues that helped build up the case.

ONE such letter came from a taxi driver. He wrote that he had driven a man from Tattendorf to the dynamite factory in Wollersdorf. The man had told him to wait and had returned to the taxi carrying a wooden box. Then they had visited another factory in Bluman, and again back to Tattendorf, where the man, carefully removing two boxes, had paid and dismissed the driver.

Hereupon the detectives got one of those lucky and rare breaks so seldom met outside of fiction. The date of this ride was May 20th, the same day the mysterious stranger had bought the hundred sticks. Also, the dynamite factory pointed out by the taxi driver was the one visited by this man; and the second stop, at Bluman, turned out to be a wholesale house for percussion caps and cartridges! Then the driver took the detectives to the house where the mysterious stranger had got off.

Unraveling a mystery is a collection of thrills and disappointments, almost evenly divided and interspersed. What now seemed like a direct line to the man wanted was a blind alley. For the building into which the man had gone turned out to be an iron foundry owned by a thoroughly respectable character, one Sylvester Matuska. He was a hard working, industrious citizen, who had no connection whatever with any radical organization.

All that they could learn of Herr Matuska's past and present was to his credit. Even his neighbors, both at Tattendorf, where he had his factory, and in Vienna, where he lived, had only good to say of him.

As for his purchase of dynamite, he had a ready explanation. He had bought it to blow up a chimney at the factory and had given the name of the quarry as a reference.

Asked where he had been the night of the wreck, September 12th, Matuska gave the detectives the surprise of their lives.

"I was a passenger on the wrecked express," he said. "The car I was in fell from the viaduct, but I was only cut around the head."

And he took from his wallet a clip-

ping from the Vienna *Free Press* which told of his experiences.

According to this interview, Herr Matuska, after arriving back in Budapest on the relief train, had hurried to a church to give thanks for his safety.

THE public funeral of nineteen of the victims brought the detectives back to Budapest. The row of coffins flanked a square, four candles burning on each. And as the procession proceeded to the cemetery through streets draped in black, among the mourners was noticed Sylvester Matuska.

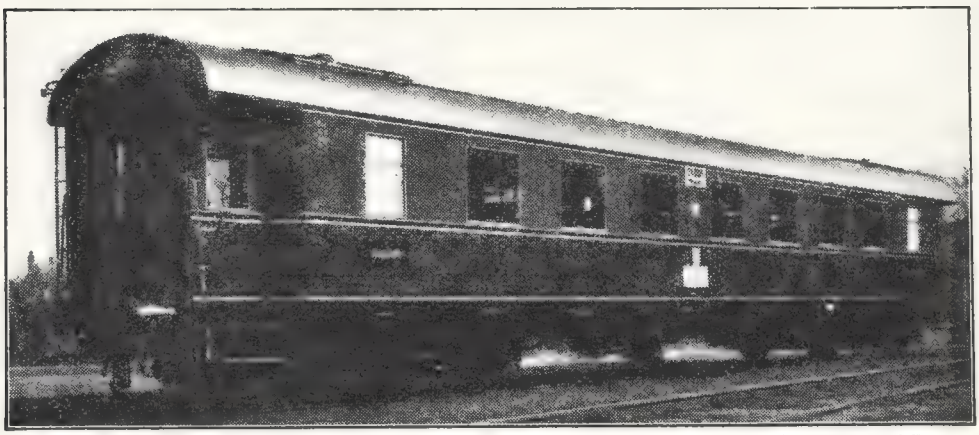
In the meantime, the Budapest detectives had been trying to trace back to their sources the other scraps found at the wreck. But just as the sticks of dynamite had led up a blind alley, so did the lamp batteries and the tape. The former came from a Budapest shop, but the attendant could only give a vague description of the man. As for the tape, it was of a foreign make, and that was all they could learn.

Just when it looked as if both the Budapest and Vienna bureaus were completely baffled, Detective Muehler had a brain storm. He suddenly recalled a communication from Berlin. In August, just about a month before the wreck at Torbagy, a letter from Berlin had arrived in Vienna asking if any criminal accustomed to use dynamite had lately been released from prison. Or was there any criminal accustomed to using it suspected of being in Berlin? Had there been any theft of dynamite recently, or had any trains been wrecked by dynamite explosions?

These questions had been prompted by the derailing of the Berlin-Frankfort express at Juterbog. Fortunately no one had been killed; but 109 persons had been more or less severely injured.

Three details of this disaster now stood clear. That express had been derailed by an explosion of dynamite; so had the Torbagy catastrophe. Both wrecks had occurred on high places; at Juterbog on a hill 40 feet high, at Torbagy on a viaduct many times higher.

And the third coincidence was that just as the detectives at Torbagy had found a printed leaflet with a radical message, so had the Berlin agents found the front page of *Der Angriff*, the Socialist paper, fastened to a nearby tree. On it was written the advice:



Courtesy German Tourist Information Office

Typical Passenger Equipment in Central European Express Service

"Awake, Revolutionaries, awake. Victory! Victory!"

At that time the Vienna police had merely sent to the Berlin queries an answer regretting that no information was had.

But now the idea occurred to Detective Muehler, as he pondered over these details, that if it could be proven the Juterbog wreck had been effected by the man responsible for the Torbagy disaster, then the German clues, plus the Hungarian data, might help them to track down the guilty party.

The three points of similarity were pointed out to Dr. Bruno Schultz, head of the Vienna Police, who agreed with Detective Muehler that a trip to Berlin might be worth while.

Muehler took with him a photostat copy of the poster found at the Torbagy wreck. If the printing on it should match the message on the front page of *Der Angriff* left behind at Juterbog, there would be every reason to think the same person had had a hand in both affairs.

At Berlin headquarters, Muehler was given the records of the Juterbog wreck. The track had been blown up for several feet, derailing the train, which then had toppled over on its side. Very little had been found of the mechanism except scraps of what had evidently been iron pipe and covered wire.

Would these scraps of wire, wondered Muehler, be similar to those found in the ravine at Torbagy? About 150 paces from the tracks, the Berlin report continued, in a small woods, the background showed the train wrecker had waited there to watch the fulfillment of his plot.

A piece of pipe was found which had proved to be identical with the scraps found at the wreck. Also, the remaining pages of the August 7th issue of *Der Angriff!*

HERE the detective had picked up a piece of wrapping paper in which the man had probably carried his apparatus to the scene. How had he come to overlook an address, faint as it was, written in lead pencil on the inner side? The detectives had called immediately on the "A. Ruppert, Berlin SW, Friedrichstrasse 9," whose name and address had been thus obtained.

They found a well-equipped hardware store whose proprietor, Herr Ruppert, faintly recalled selling, on August 6th, several lengths of iron pipe to a stranger. While Ruppert was wrapping them up, he said, the man had volunteered the information that he was an Irish officer temporarily making his home in a Berlin suburb.

"But," said Herr Ruppert at this point, "his accent was not at all like that of an Englishman, not by far. It was more, I should say, that of an Austrian. His German was excellent, and you know the English seldom speak any language but their own."

Two days later this pseudo-Irishman had returned to buy bellwire and adhesive tape. Samples of both from the Ruppert store, under microscopical and chemical analysis, were proved to be identical with the scraps found at the scene of the wreck!

On this second visit to the hardware store the Irishman had given his name as Captain Blake-Cornell, and his address as Caputh. The Berlin detectives had immediately looked up the registration cards of foreigners in that district and found that Blake-Cornell was listed as living in a house kept by a well-known and respectable German widow.

Courtesy German Tourist Information Office

The Friedrichstrasse Station in Berlin, from Which the Train Wrecker Departed for Juterbog with His Iron Pipes and Dynamite

But before they had finished reading this card they learned that the Irish officer had left Berlin in June, two months before the man using his name had appeared in the Ruppert establishment, nor had he returned before the wreck at Juterbog, on August 8th!

Berlin decided that if the stranger had used the Irishman's name, it was logical to assume that he had probably also lived in Caputh. Again the detectives turned to the registration cards of visitors, this time looking for the names of strangers who had arrived there the beginning of August. A list was made of every masculine traveler stopping over at Caputh, and a letter sent to the local police of his home town asking if so-and-so were a citizen of that community and if the address given were the right one.

This intensive research got returns. All but one traveler was satisfactorily identified. The one exception came from Dusseldorf, where the authorities denied all knowledge of Herr Gronah, who had arrived at Caputh on August 4th and departed the 9th, the day after the wreck at Juterbog.

The landlady's description of this

The Wife of Sylvester Matuska, Who Unwittingly Played a Part in the Mystery of the Train Wrecker

man tallied with that given by Ruppert. Thus the Berlin detectives were certain that the man who had planted the infernal machine at Juterbog had been the same man who had shopped at the Friedrichstrasse hardware store and lodged at the widow's house in Caputh. But that was as far as the Berlin investigation had gone.

IT was up to Austrian Muehler to tie up the Juterbog crime, if possible, with the one at Torbagy. Scraps of the tape from the Juterbog wreck were forwarded to Vienna for comparison with the bits found in the Torbagy ravine. To the delight of both the Berlin and Vienna bureaus, the report of the latter's laboratory held the two pieces had originally come from the same roll.

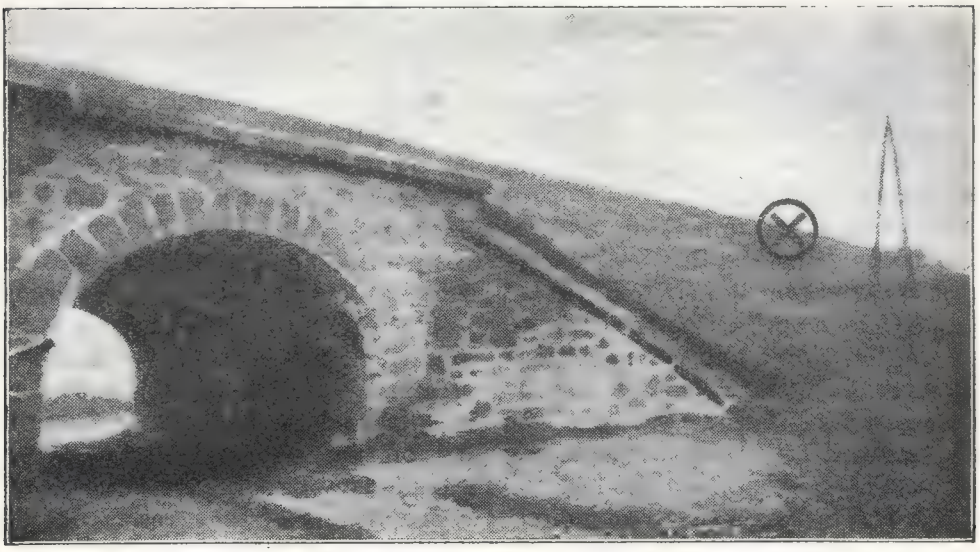
Equally satisfying and convincing were the conclusions of the expert who compared the printing on the posters left at both scenes. Printing can as easily be identified as handwriting. The expert consulted held that both specimens had been prepared not only by the same hand, but chemical tests showed that both had been written with the same brand of indelible pencil!

Both Dr. Gennat and Dr. Schultz, respective heads of the German and Austrian bureaus of police, were convinced by this evidence that they had to deal with a man out of the usual run of criminals—an international maniac, who for some motive delighted in wrecking trains.

Could it be taken for granted that the disasters of Juterbog and Torbagy were the only two souvenirs of his intentions? A letter describing this man was now circulated throughout Austria, Hungary and Germany, asking for information of train wrecks in general and in particular about a man in his forties, clad in a tweed fawn-colored suit with knickerbockers, a cap of the same material and wool hose.

While nothing had been seen or heard of a person answering the description, a letter from Ansbach, Austria, told of a train wreck on January 30th, 1931.

At 11.45 P.M. the express from Vienna to Passau had been derailed, the engine and first four coaches turning over. Three were killed, many severely injured, some badly crippled.



Scene of the Wreck at Ansbach, Austria. The Cross Marks the Spot Where the Train Wrecker Fastened the Vises and Iron Bar on the Rails

The cause of the wreck was not hard to find; on each rail an upright vise had been screwed, and they held firm an iron bar two inches in diameter. The wheels of the engine had been unable to force this barrier aside, so the train had toppled over and rolled down a hill forty feet high.

When daylight came the detectives who hurried to Ansbach found evidence that about 2,000 feet from the scene a man had been standing for some time—at least long enough to smoke three boxes of "Khedive" cigarettes. Other articles were found at this spot, but they were of little use at the time. Yet, as later events will show, they were important.

But most interesting was the report that, in addition to the empty cigarette boxes, paper scraps were scattered on the ground, where they had been blown about.

Gathered and pieced together, they had formed a sheet of wrapping paper on which had been printed the beginning of a note. The words read: "Workers of the World, you have nothing to lose but your chains"—a well known slogan in radical circles.

Was it possible that this poster had been written by the same hand that had prepared similar messages at Juterbog and Torbagy? To make a long story short, handwriting experts called in held that the printing on this reconstructed poster was identical with that of both the others!

IT was evident that Germany, Austria and Hungary were fighting a common enemy. Representatives of the railroads and of the cities of Berlin, Vienna and Budapest, plus the detectives from the three cities, formed an alliance whose objective was to locate this dangerous madman. All information was to be pooled, accessible to everyone, with the hope that from an overwhelming mass of detail enough truth could be sifted to unravel this mystery.

During the weeks that followed, this organization read more than 14,000 letters coming to headquarters in the three cities. Every tip was followed

up; no detail was too insignificant to be overlooked. More than 5,000 clues were investigated; several hundred persons, recognized criminals and respectable citizens were at one time or another under suspicion.

But it was hard to build up a plausible theory. What did this fiend accomplish by wrecking trains? What could his grudge be against the railroads involved, or the countries concerned? The man did not gain in any way by these wrecks. There was not the slightest evidence of any looting at any of them.

Nor had the wrecks been an indirect way of putting over an insurance fraud. This possibility had been considered. Every large insurance company had forwarded to this international bureau a list of its clients or their heirs who had received compensation from them. Not one person had been in even two wrecks, or had derived any benefit from more than one.

Was it power this fiend wanted? The joy of watching the overthrow of fast-moving trains?

A detail, common to both the Ansbach and Juterbog wrecks, caught the eye of Dr. Bruno Schultz, chief of the Vienna police. Apparently at both places the man had watched the wreck from the side lines, like a small boy at a football game.

A comparison of the wrecks and their backgrounds backed up this theory. The first wreck at Ansbach had been brought about simply, the train being merely derailed. At Juterbog dynamite had been used, the location being a hill down which the overturned train had catapulted. At Torbagy the maniac had staged the derailing on a viaduct which provided a drop higher than Niagara Falls.

As the user of drugs must increase his dose to get the necessary reaction, so had this fiend increased his thrill each time. Yet, it now occurred to Dr. Schultz, the detectives had brought in no report of the presence of an observer at the scene of the wreck at Torbagy. True, there had been the poster. But no mention of a lookout, such as that at Ansbach and Juterbog.

Thus it was logical to take for granted that if the wrecker had been present at Ansbach and Juterbog, he had not been far away when the train fell off the viaduct at Torbagy. It was too late to expect to find any clues in the vicinity of the wreck. But the survivors could still be reached. Thus a new group of detectives was assigned to begin another investigation.

WITHIN a few days these reports were in. A few people recalled more details. Among them was Count Paulffy-Daun, who had been catapulted from the falling train and had been the first to go for help.

"I was slightly stunned by my fall," the Count said, "and when I came to I found staring at me a man who addressed me in Hungarian. He had fallen, he told me, from the third class sleeping car, landing on bushes as I had, thus escaping injury.

"But what interested me," he continued, "was the condition of this person. There was I, broken arm, black and blue, my coat ripped up the back, my trousers ragged, and all this man had to show for his experience was two barely visible cuts on one cheek. He didn't look at if he'd been in the wreck at all."

The detective interviewing him tried to interrupt to ask the Count if he knew this man's name. But the latter went on:

"And there was only one third-class

He hardly Looks Like an Insane Man, Does He? Rogues' Gallery Portraits of Sylvester Matuska, One of the Most Amazing Train Wreckers of All Time

sleeper on the train, I read in the papers. Everyone else in it was killed. It was one of the cars that fell headfirst off the viaduct. *Funny that Matuska only got scratched!"*

The detective got the name he wanted, so brought the talk to a gracious end.

At once headquarters decided to question Sylvester Matuska, who was remembered as the purchaser of dynamite of the same grade used at Torbagy. He was asked where he was on August 8th and January 30th.

Matuska's answer was brief: he had been at home on both occasions in the company of his wife and daughter.

But this alibi was quickly contradicted. According to the records of the telegraph office, Frau Matuska had received a money order of 500 shillings from S. Matuska in Berlin on August 7th. As even better proof of Matuska's presence in Berlin the first week in August was Herr Ruppert's identification of him as the purchaser of the iron pipe, tape and bell-wire found at the Juterbog wreck. A search of Matuska's home was now ordered. In a closet was found the costume of fawn-colored tweed, knickers, jacket and cap, described earlier by both Ruppert and the landlady of the Berlin suburb as having been worn by the mysterious stranger.

The oily surface o. the right hand pocket in the knickers caught the attention of the detectives. Its lining was carefully cut out and taken to a laboratory for analysis.

There the dust was carefully removed. Grains of a yellowish substance thus obtained under the microscope were identified as dynamite. Compared with dynamite of the grade bought by Matuska and found at the Torbagy wreck, those from the pocket were found identical.

When asked to account for the hundred sticks he had bought in May, Matuska stuck to the story of the chimney he had blown up at Tattendorf, although neighbors told that this chimney had been destroyed in the spring of the year, long before Matuska had bought the explosive.

As for the remainder, said Matuska, he had thrown the sticks of dynamite away in a brook near his factory and buried the percussion caps and cartridges in a hole under the wall of the factory. Though the brook was dredged not a trace of the sticks could be found. Even when a strip two feet wide was

dug up around the base of the building, only one cache was uncovered, and this contained but seventeen caps.

OTHER connecting links were soon formed; in Matuska's home were found several indelible pencils of the same make as that which had written the three messages left at the wrecks. Also Matuska smoked only one brand of cigarettes: "Khedive," which the man who had looked on at the Ansbach disaster had smoked as he waited.

A yardstick, identical with the one used to devise the appartus at Torbagy, was found in the man's home. And this one was bought the third week in September, just after the Torbagy catastrophe.

Many and varied were the denials put forth by Matuska. Despite the evidence the detectives had gathered, they were worried. For try as they would they could not uncover any motive for the wrecks. Nor had Matuska so far shown any obvious signs of a disordered mind.

Suddenly, one day, Matuska seemed extraordinarily tired. Perhaps the insistent questioning of the detectives had worn down his resistance. Anyway, he asked that he be taken to Dr. Schultz.

"Thirty days has for me a symbolical meaning," he said. "The wreck at Torbagy took place a month after Juterbog, didn't it? Well, one month from the last day I will talk."

And that was all Matuska would say.

On October 12th a group of anxious detectives grouped around Matuska, waiting for him to speak.

"I should never have denied my actions," were his first words. "God Himself gave me the inspiration to do what I did; it was the Devil that prompted me to deny.

"For," the insane man went on, "I am destined to become the leader of men, to teach a new life. And to draw men to me, I first had to make myself known to them.

"The inspiration came to me to bring this about by some great catastrophe. After much thought I decided to wreck a luxury train in every country. What more appropriate night to begin my campaign than the day of my patron saint, Sylvester?

"My first attempt, gentlemen," and Matuska bowed courteously to his fascinated audience, "was made on Sylvester night, the 31st of December. You never heard of it because it was not successful. I journeyed to Ansbach, to the same place where the first work you know of finally took place, and with a wrench unfastened several plates on the rails.

"But I was not very skillful and I had not allowed myself enough time. Before I had removed enough plates to cause damage, a train came along and I had to retire."

The report submitted by the track walker of this section the following day verified this attempt.

While working out his plan, he paid another visit to Ansbach, timing the trains, and when he found that from 11 until 11.45 P.M. no train would pass he chose this time to carry out his second attempt on January 30th.

To disguise his appearance, he bought a suède jacket and dark glasses in Budapest. At Neulengbach he purchased the vises and iron bar. In his new costume he set out for Ansbach, fastened his apparatus on the rails, and, from a safe place on a hill, watched the train topple over.

But in his hiding place he destroyed the poster he had started to print. When he departed he left behind the

empty cigarette boxes, a couple of wrenches and the pasteboard box in which he had brought out a snack to eat. His dark glasses he threw in a brook.

These articles had been found; the lunch box had been traced back to a delicatessen store in Vienna, where a man in suède jacket, dark glasses and with a wad of cotton fastened to a spot on his right cheek had purchased it. But here the trail had ended.

Home again, Matuska managed to burn his suède jacket and woolen hose without his wife's knowledge. And then, having destroyed or left behind everything pertaining to the Ansbach wreck, he was ready to go ahead.

IT took him a long time to make up his mind about the second wreck. He was undecided about the place and the means to be used. The derailing at Ansbach had not been spectacular enough to get the space in the papers he wanted his wrecks to get.

He had taken frequent trips to Berlin and had noticed the high curve at Juterbog. In April he made the trip, disguised in the fawn-colored tweed suit, knickers, cap and oxfords—a costume never before worn by him. On arriving in Berlin he had bought an acetylene torch, and on April 8th had gone to Juterbog.

Early in the Morning of Matuska's Trial Crowds Formed Long Lines Waiting to Be Admitted. Note the Great Number of Women

Unfortunately the acetylene torch had been difficult to handle. Instead of burning off parts of the rail, as he had intended, he gave himself some very severe burns on his legs. As he told about it he jerked up both trouser legs to exhibit these scars.

Back in Berlin he had persuaded the store where he bought the torch to take it back at a discount. And he had returned to Vienna, with the idea of dynamite in his brain.

To learn how to use it and where to

Sylvester Matuska in Court, Boasting of His Prowess as a Train Wrecker

buy it Matuska spent quite some time at the quarry of his friends. When he decided he had learned as much as he could, the third week in May he went to the dynamite factory at Wollersdorf and bought 100 sticks, and then to the wholesale house at Bluman where he got percussion caps and cartridges, as the taxi driver had reported.

During the next two months Matuska practiced with dynamite, caps and cartridges in the woods back of his factory in Tattendorf. August 6th saw him on the way to Berlin, carrying a valise snugly packed with dynamite and caps, which he blithely checked at the baggage room in Berlin until night. Then he took it and went to the boarding house at Caputh.

On the 7th he visited the Friedrichstrasse hardware store and bought tape, bell-wire, and the sections of iron pipe already mentioned. The following morning, his valise with him, a copy of *Der Angriff* in his pocket, he rode out to Juterbog and made his way to the hill on which he planned to place his infernal machine.

He had the whole day before him. From earlier observation he had decided nine P.M. the best time to plant his explosive, for from that hour until 9.45 P.M. no train passed.

The afternoon went slowly. Matuska wrote the message which he later tacked to the tree. He took his time stuffing two of his pipes with dynamite and caps. Then he sat down to wait placidly until evening. The 9 P.M. train passed; Matuska hurried down to the tracks with his apparatus. The pipes he placed midway between the rails just where the train rounded a curve.

He was careful to place the ends with the caps facing the rails nearest the wooded space where he had established his lookout. Then the wires were gently pulled over the rail, across the road, and on toward the ash tree, around which he fastened the ends.

By letting the wires rest casually in the road, there was little danger of a passing wagon or automobile drawing them tight enough to explode the caps.

HE could hear the train coming long before he saw it. He hurried over to the ash tree and, trembling with excitement, took both wires firmly into

his hands. As the engine pounded and puffed onto the high curve, Matuska ran back a few steps, drawing tight the wires. This caused the caps at the ends of the dynamite-filled pipes to crash against the inner side of the rail. They went off. He had planned well!

The explosion that followed overturned the entire train, throwing engine and coaches down the hill. With glowing eyes Matuska told of the hissing steam from the overturned engine mingling with the cries of the wounded. No, he had not gone to help, but had stayed in his retreat for a while, during which time he managed to pull back the wires, roll them up and stow them away. With an armful of the Berlin papers to read on the return trip, Matuska left for Vienna the next day.

"I was already planning my next wreck," said Matuska, "and I picked out the viaduct at Torbagy for its background. But I knew there I couldn't get near enough to set off the dynamite myself, so I had to work out another scheme."

When the detectives confronted him with photos of the wrecks he grabbed the prints and kissed them.

"My occupation is that of a train wrecker," he boasted.

On September 8th, while Matuska was getting an infernal machine together at Torbagy, a stick of dynamite exploded and frightened him.

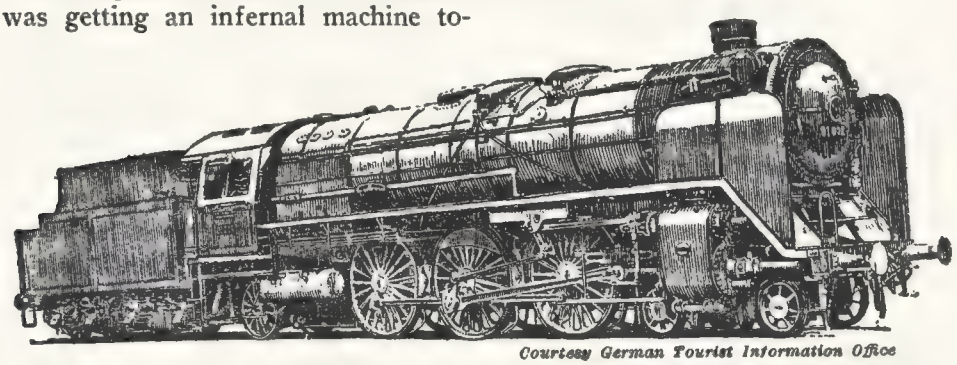
He returned, however, on the 12th, crawled out on the viaduct around 11 P.M., unpacked his apparatus, and fastened it to the rail in such a way that the passing of a wheel made the necessary contact.

That was all. He had had no accomplices; all three wrecks had been planned and carried out by himself.

The jury at Vienna which tried him for the Ansbach wreck considered Matuska fully responsible for his actions. And it brought in a verdict as heavy as the law permitted, which was only six years at hard labor, to be followed by banishment from Austria.

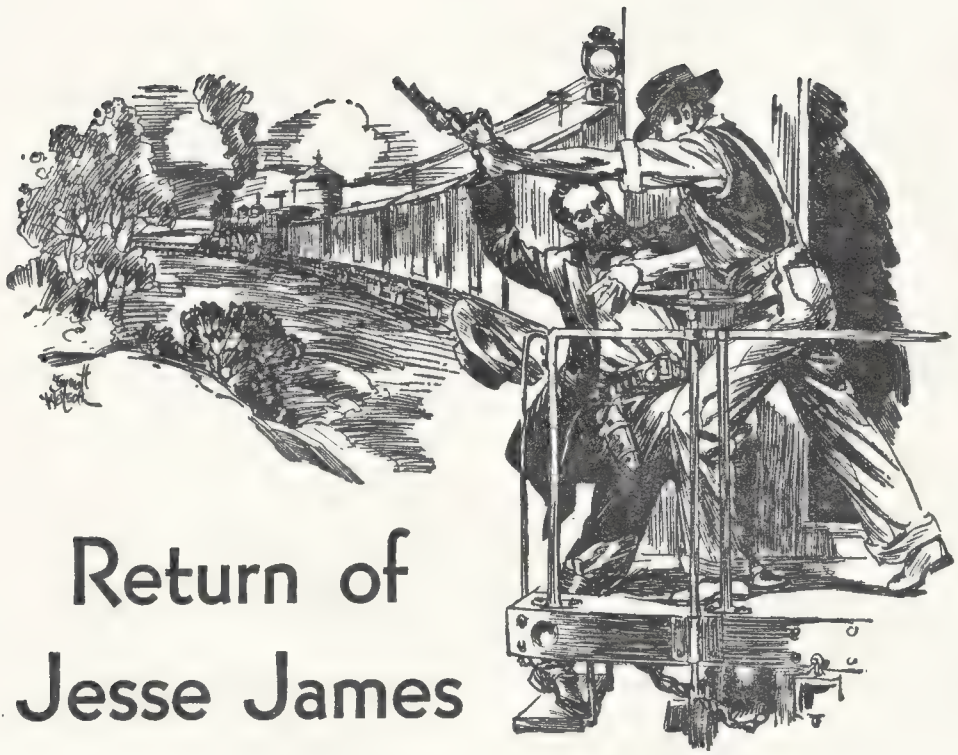
But there is no danger whatever of Sylvester Matuska ever being free to indulge in his fatal hobby. When those six years have elapsed and Matuska walks through the gates of his prison, he will find waiting two groups of detectives. One will represent the German authorities, the other the Hungarian.

It is not decided yet which will have the right to Matuska. Not that it makes much difference. Both countries believe in a death sentence. The name of the train wrecker who terrified Europe has already been written in the Book of Doom!



Courtesy German Tourist Information Office

This Is the Type of Passenger Engine That Hauls Express Trains Through Juterbog. The Largest Two-Cylinder Express Locomotive on the German State Railways. It Was the 12,000th Engine Built by A. Borsig Co., Berlin



Return of Jesse James

Tom Carvel Had a Code of His Own, Back on the Old Hannibal & St. Joe!

By ALEXANDER SCOTT

Ex-Fireman; Author of "Broken Rails," "Cloudburst," etc.

"THE Injuns called Kentucky the dark and bloody ground, long time ago; I bet they'd have figured out some such sort of a name for this Missouri country if they'd been hanging around here the past dozen years!"

Tom Carvel muttered the words to himself as he gazed across a landscape that appeared doubly wild and desolate in the gathering dusk.

The wheels of a swaying caboose on the old Hannibal & St. Joseph Railroad clicked monotonously over the joints. Link-and-pin couplings of the long string of flats and boxes creaked and clanged. The steady *chug-chug* of the diamond-stack engine drifted back to the brakeman's ears.

"They say Jesse James and Cole Younger hid out on that cliff there once," he mused, peering through the gloom. "A bad one, that Jesse James—got a tough deal when he was a younker and hit back. Guess he just about has to be bad now. They'll sure hang that bandit if he's ever caught. Well, 'spose Jesse's got it coming to him. And there's the tree where Bill Quantrill hung four men!"

A sudden quavering shriek split the

silence. A shadowy shape rushed out of the dusk and Tom shrank back. He laughed shakily as the big owl swooped past the caboose, its silent pinions grazing the eaves.

"Thought it was 'Bloody Bill' himself coming to get me," the brakeman chuckled. "And of course Sam Thompson would have to blow his whistle just then!"

There was a stir inside the caboose, and something that sounded suspiciously like a snort.

"Say," demanded a querulous voice, "why don't you come in off that platform and quit talkin' to yourself?"

Tom grinned as he entered the car. Old Lafe Hogadorn snorted again.

"You younkers are allus hangin' around on the platform and leavin' the door open," the veteran conductor complained. "Want a body to ketch their death of cold?"

"Sorry, Dad," Tom apologized, "I was just thinking what a wild old time of it this Missouri country has seen since the St. Joe was built."

HOGADORN'S eyes brightened. To old Lafe the H. & St. J. was more than just the company he worked for. It was the one subject over which he would grow enthusiastic.

"They finished her in 1859," he reminisced, "jest before the war started. All the St. Joe boys were for the Union and they had a lot to do with Missouri swingin' inter line. Stirrin' times around here durin' the war, too. Quantrill, the rebel guerilla leader, bloodiest man what ever lived, raided in this country, and there was plenty more purty nigh as bad as him. F'rinstance, the Reno brothers."

Tom nodded. "And now we got Jesse James and his gang."

"Uh-huh," Lafe agreed. "I was ridin' that Iron Mountain train the time they robbed it over Rocky Cut way. Didn't get no good look at any of 'em, though—too skert. Them fellers is plumb bad; no good in any of 'em."

Far ahead the whistle wailed. Lafe Hogadorn got stiffly to his feet. "Thompson is gonna stop for water," he said. "Think I'll jest walk over and ride the engine for a spell. You keep a eye on things back here."

The train jolted to a stop. Tom got his lanterns and walked slowly back along the track. Glancing over his shoulder, he could see the squat water tank outlined in the feeble beam of the headlight. The head brakeman's lantern was bobbing toward the rear as he scanned the "rattlers" for hot boxes.

"I'll just take a look at those two cars of powder myself," Tom decided. "Don't want to take any chances of them getting hot, right next to the caboose that way."

Soon five long blasts sounded from the distant locomotive, calling in the flag. Tom hurried ahead, gave the two powder cars a swift examination and waved a highball. He caught the caboose as the train got under way, closed the door and started a fire in the stove; the night was growing chilly.

The caboose began to rock and sway as the clicking tempo of the wheels quickened. Tom settled himself comfortably and mused.

He smiled a trifle bitterly as his thoughts flew back to the day, several years before, when he had left his Virginia home and set out with high hopes for the West. He'd show 'em! He'd come back with plenty of money, buy back the Carvel estates, impoverished and lost because of the war, restore the Carvel name to its old-time dignity.

"Guess that day's still a long time

off," he told himself. "Takes quite a while to save so much money from a brakeman's salary. But just the same, I don't figure I'm doing so bad. Railroading is fine work and there's plenty of chances to get ahead. I sure ain't ashamed of my job, and I—"

Crash! Tom was thrown violently to the floor. He scrambled to his feet and again was hurled headlong.

The caboose was bucking and jumping. Somewhere ahead sounded a series of crashes, and a horrible grinding, sickening to hear.

"Busted axle—cars turning over!" Tom panted, striving to rise a second time.

The caboose lurched wildly. There was a terrific shock. The brakeman felt himself flying through the air. A dazzling white light blazed before his eyes; then a wave of blackness which stayed with him.

PAIN was flowing through Tom Carvel's body when he came back to a knowledge of his surroundings. Most of it seemed to originate in his chest and left side. He tried to ease his position and found he could not. Something was pinning him flat. He was caught like a rat in a trap.

His exploring fingers encountered a heavy beam. This beam, shattered and splintered, but still sufficiently solid to hold him prisoner, rested across his breast and pressed heavily against the ribs on his left side. The sharp, stabbing pains told him one or more bones were broken.

Tom tried to shout, but his voice was a mere gasping croak. He writhed his body against the jumbled woodwork on which he rested. The resulting pain left him weak and sweating. He relaxed and lay motionless, his eyes straining against the dark.

The dark was graying. Tom could now dimly make out a twisted mass looming blackly above him. The light increased and he recognized the mass as the wreckage of the caboose in which he had been riding.

His ears, alert for some sound of approaching rescuers, caught a subdued crackling; his numbed brain puzzled over what it could be. The gray light took on a reddish tinge—and then he knew!

With the knowledge came near panic. Tom squirmed until sharp agony forced him to desist. He breathed in choking pants, listening to that ominous crackling that grew louder and louder as the seconds passed —the crackling of the flames that were creeping swiftly over the wreckage. *The overturned stove had set fire to the caboose!*

But help was at hand. Tom's heart gave a great throb as shouts resounded, faintly at first, quickly drawing nearer.

"You in there, Tom?" yelled old Lafe Hogadorn, clawing his way over the broken timbers.

"We're coming to get you, younker," wheezed fat Sam Thompson, the engineer. "Praise be, you ain't kilt entirely."

The head brakeman stumbled forward, lantern in hand. "Hadn't I better get back and flag?"

"Hell, no!" Hogadorn told him. "Track's straight and anybody comin' can see this fire a mile. You lend a hand and help get Tom outa here 'fore he's roasted. All together now, boys, heave on this scantlin'!"

They heaved, but they got no results. Thompson stumbled back, swabbing at his dripping face.

"Don't that beat the devil?" he growled. "The whole damn car's jammed on top of this beam!"

"Here's a pry," said the head man, "maybe we can move it with this."

They shoved the stick of timber under the beam and strained until their joints cracked. The beam did not move.

Old Lafe glared frantically about. "If only we had a ax," he groaned, "mebbe we could cut him out. Henry, you hustle to the engine and get the coal pick; might do something with that."

The fireman departed at top speed. Hogadorn examined the beam. "You hurtin' bad, Tom?" he questioned.

"Not so much when I lie still," the brakeman replied, "but it seems to be getting awful hot in here."

Lafe started. Engrossed in the work of rescue, he had almost forgotten the fire. Now he realized the flames were leaping fiercely and eating their way toward the rear of the caboose, where the imprisoned man lay.

"Hell, we gotta hurry!" he barked.

"Lafe!" Tom's voice was gasping but firm. "Lafe, listen to me, there's —there's two cars of powder right ahead of the caboose. The fire'll get to them any minute; and when it does, I want you to be in the clear."

Tears were furrowing the old conductor's smoke-streaked cheeks. "Boy," he mumbled brokenly, "I ain't gonna leave you—none of us are!"

"Here's the coal pick!" shouted Henry.

The brawny engineer seized the tool and swung it with all the force possible in the restricted space. The blunted point bounced off the timber as if it were steel.

Thompson tried again and again, but could make no impression on the stubborn wood. Finally he was forced to desist and crawl from beneath the wreckage for a breath of smoke-free air, just as a strange voice demanded:

"What's goin' on down there?"

THOMPSON stared into the darkness. A company of horsemen, unheard by the busy trainmen, had ridden up to the edge of the firelight. In the lead was a lean, black-bearded man who had voiced the question. There was something strangely familiar about his face.

"Man caught in the wreck," Thompson puffed. "Can't get him loose."

The black-bearded one rode slowly forward. He was mounted on a splendid horse that pranced nervously as it approached the flames. A word from the rider quieted the steed.

In a single lithe motion he was out of the saddle and peering beneath the wreckage. The engineer noticed that a brace of heavy revolvers and a huge bowie knife hung at his belt. The horseman turned piercing eyes to Sam Thompson.

"Why can't you get him out?"

Thompson explained briefly. The stranger nodded, gazing speculatively at the futile effort of Hogadorn and his two companions. Abruptly he spoke:

"Come outa that, you three fellers."

Old Lafe glared over his shoulder. "Who the hell—" he began.

"I said, come out!"

Hogadorn hesitated, then crawled from beneath the caboose, the fireman and brakeman following. Something about the quiet stranger commanded obedience.

The bearded man straightened. "Powder in them two up-ended cyahs, ain't there?" he questioned, peering at the glaring red labels. "We'd better work fast."

He turned to the silent group in the shadows. "Frank," he called, "you

an' Cole bring me a coupla ropes. You get one, too, Bob. The rest o' you kinda spread out along the road, an' keep yore eyes open."

Three men rode forward, uncoiling long *riatas*. The others vanished in the shadows.

"Ease them ropes down over top o' these big timbers," the leader commanded. "Look lively now, or we'll all be landin' plumb in the middle kittle o' hell."

"What you gonna do?" one of the men queried as they obeyed.

"Tie them ropes onto the beam what's holdin' the feller down. Passin' 'em over them timbers gives 'em a' upward slant. You fellers walk yore horses away steady an' it'll pull the beam up enough to get him loose. See?"

The black-bearded man crawled beneath the wreckage.

"Here, let me help you," old Lafe volunteered.

The stranger snorted.

"Don't need help. You fellers get out o' the way; ain't room for more'n one man to work handy in here."

With swift, sure hands he secured the ropes. Then he squatted beside the prostrate brakeman.

"Say," gasped Tom, "you don't wanta stay here. If anything slips, the whole wreck'll come down and you'll be caught, too. You get in the clear and I'll crawl out soon as they get me loose."

"You'd play hell crawlin' out with them busted ribs you got. All right, Frank, tighten up on them ropes—steady, now!"

"You—you work on a railroad?" Tom panted.

The bearded lips twitched into a grim smile. "Yeah, I guess I've worked on several railroads. Easy, don't you try to do nothin'. I'll handle you when the time comes."

CREAKING and complaining, the beam moved. The tumbled wreckage above it shuddered. Tom held his breath painfully as planks and timbers were yanked loose and thudded to the ground. Any instant he and his rescuer might be buried beneath an avalanche of blazing wood.

The victim gagged with hot smoke. Fire was all about them now. He could see the other's shirt brown and char with the heat. There was a smell of burning hair as the black beard crisped. Tom moaned softly.

"Steady," came the calm voice, "heah we go."

The brakeman gasped as pain wrenched at his body. He was being drawn from beneath the beam. His rescuer was shuffling along on all fours, growling to himself.

"Stuff's settlin' down fast. Hardly room to get out."

Tom could see the mass of wreckage sink down to close the narrow opening which was their only hope. The bearded man was lying flat now, inching forward, drawing the helpless brakeman after him.

"Feller, leave me, save yourself," pleaded Carvel.

The other only grunted. Suddenly he halted. His muscular hands worked swiftly.

Tom was hauled forward, shunted ahead of his rescuer. A heave of the other's big shoulders, and the brakeman plunged through the opening. He rolled down the slight embankment, into the arms of Lafe Hogadorn. Behind him sounded a crash as the wreckage collapsed in a mass of flames.

Hogadorn was knocked off his feet by a hurtling body. Fiery stabs of

agony shot through Tom's breast, but from his lips welled a heartfelt prayer of thanksgiving. That tumbling form was his gallant rescuer, who had won free in the nick of time.

The black-bearded man shot into action. "Grab hol' the stirrups, you fellers," he shouted to the railroaders. "We gotta get away from here."

How it was done, Tom never knew, but in some way the stranger mounted, the helpless brakeman in his arms.

The horses swept away. Hogadorn, Thompson and the others clung to the stirrups, bounding along, stumbling, dragging, but never relinquishing their grim holds.

There was a blast of thunder, a blinding flash of bluish light. The horses floundered, snorting with terror. The iron hands of their riders held them in check as flaming timbers, planks and fragments of steel rained about them. A sharp command came from the leader:

"That'll do—hold up—everythin's over now."

The trembling steeds were pulled to a standstill. Trainmen let go the stirrups and sank gasping to the ground. From the railroad a whistle hooted staccato question.

Tom's rescuer turned in his saddle. "Train comin' back there," he said. "Cal'late it'll look after you fellers. You can take care of this hurt man, now."

He passed Tom down to the ready arms of Hogadorn and Thompson, gathered up his reins.

"Say," protested old Lafe, "you ain't gonna leave us now, are you? Come along with us. The road'll wanta do somethin' for you."

The stranger chuckled, so did his companions.

"Yeah," he drawled, "I 'spect the road *would* wanta do somethin' for us, but we jest nacherly can't afford to stop right now. We're headin' west, and we're in a hurry."

Hoofs clicked, growing in volume as the rest of the band fell into line, diminishing with distance.

"Who—who were they, Lafe?" Tom asked.

"Dunno," replied the veteran, "fellers headin' for the gold fields or a land rush, p'haps, and don't want to chance bein' late and missin' somethin' good."

TOM CARVEL spent weary months in the hospital. Summer passed and autumn was in the air before he was able to take his run once more on the Hannibal & St. Joe. He had a different conductor now, old Lafe having been transferred to another point. The new man was garrulous.

"Hear tell the James gang tried to pull a bank robbery at Northfield, Minnesota, last week," he told Tom. "Made a bust of it—two of the outfit shot dead, some more wounded and caught, rest all scattered. Sheriff figgers Jesse will head this way."

The train stopped at a lonely water tank. The conductor dropped to the ground.

"Guess I'll ride the 'gine a while," he observed. "Don't forget, we stop to pick up some cattle cars at that hill sidin' ten miles on."

As the track behind was straight for more than a mile, Tom did not consider it necessary to leave the caboose to flag. He stood on the back platform, casting an occasional glance to the rear.

The right-of-way was flanked by dense growth. A dozen yards back of the caboose a road wound from among the stunted trees, crossed the railroad

and vanished in the brush on the farther side.

Tom gazed idly at the rutted track, his mind elsewhere. The sharp click of approaching hoofs drew his attention.

From out the growth staggered a tall roan horse, evidently in the last stages of exhaustion. It stumbled to its knees as it reached the crossing. The rider, apparently as fatigued as his mount, was flung over its head. He struck heavily and for a moment lay still.

The horse regained its feet, whirled and shambled back the way it had come. The rider struggled to his knees and crouched swaying, his eyes glaring wildly. Then he surged erect and lurched drunkenly along the track.

Tom stared in astonishment, for the moment not realizing the other's intentions. He came to himself as the man swung up the caboose steps.

"Say, what you—" Tom began. He ducked, lunged forward and grabbed the intruder's wrist just in time. There was a moment of fierce struggle and the revolver the other had drawn was wrenched from his hand and he was hurled to the platform.

Tom stepped back, gun ready. Then he stiffened, the weapon sank and he stared incredulously.

The prostrate man was lean and hard-bitten. His face was haggard, his piercing eyes were wild. A heavy black beard fringed his lips.

The brakeman gasped. "Where did *you* come from?"

The other came slowly to his feet. "Guess I'm done for," he said dully. "They'll get me this time, all right."

"Who'll get you? What you talking about?" demanded Tom. "Don't you know who I am?"

Recognition passed across the bloodshot eyes. "Yeah, I remember you now. Got all right, I see. Do you hear 'em comin'?"

"Hear who?"

"The sheriff and his men; they're right behind me."

"You mean they're after you?"

"Sho' they're after me—gonna get me, too, I guess."

The engineer was calling in the flag. Tom thought swiftly, came to a decision. He leaned out, waved a high-ball and turned to the door.

"Come in here," he told the fugitive.

The man followed him into the caboose. Tom lifted the cushioned lid of the long seatbox built against the wall.

"Crawl into there," he ordered. "If the sheriff gets here 'fore we pull out, I'll stall him off somehow. We stop at a siding up in the hills; it'll be dark by then and you can skin out 'fore the conductor comes back. Here's my lunch bucket and here's water. Feed up while you're in there and you'll be a new man."

OUTSIDE sounded galloping horses and shouts. Tom hurriedly lowered the lid, leaving a crack to insure air, and strolled onto the platform. A big red-faced man was just swinging up the steps.

"Say," he shouted to the brakeman, "didja see anythin' of a feller dodgin' inter the brush hereabouts?"

"Feller dodging into the brush?" repeated the railroader.

"Yeah. We jest caught his hoss comin' back along the road. Looks like he fell down there by the railroad."

"What kind of feller?" stalled Tom.

"Lean, with black whiskers," shouted the sheriff. "Holy jumpin'

Christopher, don't you know who it is? That feller is Jesse James."

"Jesse James!"

"Yeah, we chased him clean across the county. There's close to fifty thousand dollars' reward on that bird."

"Fifty—thousand—dollars!"

Tom Carvel breathed deeply. Fifty thousand dollars! With far less than that he could go home to Virginia, buy back the Carvel properties and live in ease. He turned toward the seatbox.

But it wasn't the seatbox that met his gaze. It was a twisted, shuddering wall of flame-streaked wreckage that climbed up into his mind. In his ears rang the memory of a calm voice: *"Steady, heah we go!"*

The old diamond-stacker hooted two sharp blasts; the couplings jangled; the caboose rocked as the slack straightened out. The sheriff paused on the lowest step.

"You say you didn't see him dodge inter the brush along here?"

Tom Carvel looked the officer squarely in the eye as the caboose began to move. He spoke clearly and distinctly:

"No, sir, I sure didn't!"

THE ENGINEER'S DREAM

AN old gray-haired man sat a-dreaming
In his chair by the fire so bright,
While outside the door it was storming
And the wind howled a song through the night.
He dreamed of his son on his engine,
The fastest express on the line,
And it seemed that he sat there beside him
As he sped through the night making time.

He dreamed that they sped 'round the mountain
And the night was as dark as the tomb,
It seemed there was danger around them
But the headlight could not pierce the gloom.
It seemed that he whispered a warning
As they raced madly on down the line,
But his son only smiled as he answered:
"The express must be there on time!"

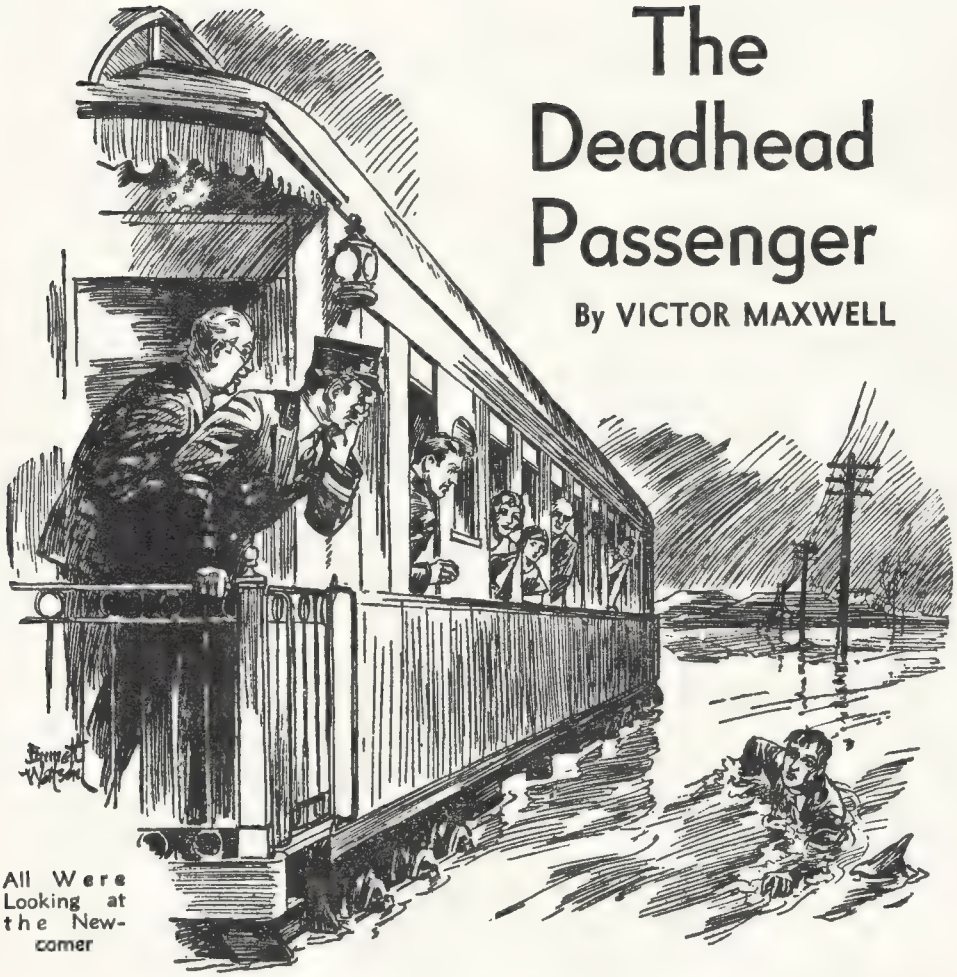
And then as they came to the river
He knew this would be their last run,
For there in the darkness of midnight
He saw that the bridge had washed down!
And then he awoke from his sleeping,
Alone by his fireside agleam;
But he didn't give heed to the warning,
For he thought it was only a dream.

Then through the night came a message
That told him his dream had been true,
That his brave son had gone to his Maker
Along with the rest of the crew.
Oh, we should regard every warning,
For we know not how soon it may be
When that last call will come from the Master,
And we go to that home o'er the sea.

—ANONYMOUS, from Roy Peterson, Belvidere, Ill.

The Deadhead Passenger

By VICTOR MAXWELL



All Were Looking at the Newcomer

A Strange Tale of a Marooned Hotel Car, a Mysterious Stranger, and a Golden-Haired Girl

THE deadhead passenger was probably the first one on the old hotel car to realize that the desert they were passing over was not dry, as deserts should be, but very wet. He was lying on a board laid across the rods, hidden from sight by the refrigerator that hung under the car.

When he had established himself in this nook he had smiled; for, even in those days, hotel cars were rare and he had not expected to find one. But a few of the old, truss-framed Pullmans were still rolling over the country, with convenient rods underneath for those who dared ride them.

It had been extremely necessary for him to get to the coast. The freights moved at night; but there were discouraging tales about the brakemen and the fate of travelers who had no funds. So the deadhead passenger, being utterly devoid of cash, had de-

cided to try this train, if he could make it.

If he had glanced at the newspapers when he came into town he would have read that the Colorado had gone on one of its rampages. But he had not wasted any time reading the papers, so he made the discovery himself when a stream of water suddenly shot down the back of his neck and wakened him from the semi-coma into which the monotonous clicking of the wheels had plunged him. The shock almost threw him off the board on which he was lying.

Looking up and around, all he could see was water. Dirty, yellow water, seemingly motionless. Two dark streaks marked the rails, just about awash; the flanges, cutting into the flood, sent arching sprays of water over the bottom of the car.

With considerable difficulty he shifted his board further back, so as to gain some slight shelter from the suspended ice-box. This brought his feet into view, but he did not imagine that any brakeman was going to get out and slop around in that water. The only question in his mind was whether or not the train would continue.

The train did continue. Presently, however, it reduced its speed. He noted that the water was getting deeper; the rails were now barely visible. Here and there a dried sagebrush thrust itself up through the liquid; the rock emplacements about the semaphore bases stuck up like islands in the sea.

The speed of the train dropped; finally it barely crept along. The water now covered the rails to such depth that they were not even indicated by shadows—there was nothing in sight under him but a dirty liquid yellow.

And then the train stopped. The deadhead passenger heard a door opening, heard voices. There seemed to be an argument, but he could not catch words. He looked down and discovered that the water was not still; it was moving across the tracks. The argument above continued, then ceased abruptly.

He heard a splash, and peering ahead saw two legs moving round at the front end of the hotel car. He heard the clink of metal, the jerking of chains, the sharp hiss of suddenly released air; and the distant puffing of a locomotive. He braced himself for the jar that would come when the hotel car's slack was taken up—but no jar came. He lay there, clinging to his board for a minute, listening to the puffing of the engine; and then suddenly he knew.

THEY had dropped off the hotel car. It was too heavy, most likely, for the crippled, wheezing, branch-line engine to drag over that slippery track. He was marooned in an inland sea. His first impulse was to fling himself from the board and scramble after the retreating train; then he thought that undoubtedly there would be a brakeman on its rear platform. He couldn't catch it, anyway. He lay there, cursing, for he simply had to get to the coast.

He considered the water. He felt it. It was warm, almost tepid. It was filled with silt. He could feel the tiny grains. Well, only thing to do was to get out and beat it. Somewhere ahead was the main line, somewhere ahead the grade would rise toward the last bulwark of mountains. For a minute he thought of taking off his shoes, then realized that his feet were not tough enough. He let himself down

from his hide-away, crept out from under the car and stood up.

He was just on the edge of the ballast, and the body of the car was in his way. The ballast was perhaps eight inches high—he decided to step clear of it, so he could stand erect.

He moved out, the ballast rolling under his feet, and the water came up to his thighs, making his clothes feel heavy and sticky. But it was warm. His feet settled into the beaten path beside the ballast. With a shrug of his shoulders he moved ahead. One swishing step, another—and suddenly he was all under water!

He came to the surface, blowing the mixture of river and silt from his mouth, and swimming naturally. His cap had fallen off and was floating nearby. He retrieved it, put it on his head. Habit, that was. The water from the sodden cap ran down into his eyes, and he jerked it from his head and flung it away.

Then he realized that he was still swimming. It dawned on him that the track must have been on an embankment just there. Sensing that, he smiled grimly, and struck out for the head of the hotel car. But a considerable current was flowing, carrying him sideways away from the ancient Pullman.

Turning over on his side, he worked hard to combat the current. He had gone perhaps a dozen strokes when a sharp, cracking slam sounded on the air. Something like a gunshot, only not quite like it. He wondered what it was, but kept on swimming.

Then, momentarily, he was paralyzed by hearing a woman's voice:

"Oh, papa, papa! Come quick! Here's a man swimming out to the train!"

He thrust one foot down, trying to touch bottom, and not finding any, trod water and faced the hotel car. There was a series of rattling slams, similar to the first surprising noise he had heard, and windows all along the side of the ancient Pullman were thrown up, each opening revealing a craning head. All were looking at him. Through another window he saw the dusky face of the porter, eyes bulging at the sight of a man swimming out on the desert.

"Well, it must be old Neptune himself," a ruddy faced man leaning from one of the windows said. Then he raised his voice: "Ahoy there! You come to give us a tow? We need it."

"Don't joke with him, papa," said the woman's voice. "Can't you see that the man is drowning out there? Why can't you do something?"

The deadhead passenger looked at the window from whence this had come and merely got a confused vision of bright eyes and golden hair. A door slammed, and a blue-uniformed figure appeared on the observation platform.

"Swim over here and I'll give you a hand," shouted the Pullman conductor. "No use you paddling 'round out there unless you like it."

THIS was common sense. The deadhead passenger turned over on his side again and battled the slow current, edging nearer the rear of the hotel car. His knee struck the sharp rock of the ballast, he clambered up, stood dripping a minute at the side of the car to let some of the water run off. Grasping the conductor's extended hand, he got a foot on the skeleton step and swung up and over the brass railing.

"This is better," he admitted as he found himself surrounded by an assorted group. The girl with the golden

hair and the bright eyes looked better, too, at closer view; the eyes were brown and sparkling and kind; the face was well formed.

"Where'd you come from? What were you doing out there in the water? You swim far? Wasn't it awfully cold? Where were you going? What's the idea of swimming there?"

Questions were showered on him. He looked up, smiled. Rubbing his chin, he was thankful to feel that there wasn't much stubble upon it.

"Well, folks, I'll tell you," he said to them—but he looked at the girl with the golden hair. "I was going over to the coast, and I missed the train. So I thought I'd take after it, maybe catch it."

"You mean you swam after the train!" a woman exclaimed.

He saw that story wouldn't do. "Oh, no, ma'am. My partner and I, we took his flivver. Knew the train would be slow, on account of the water. We had it in sight when, well, I guess we must have struck a gully in the road where the bridge was washed out. Or maybe missed the road. Anyway, all I know about it is that I was swimming."

"And your partner?" asked one of the men.

The deadhead passenger frowned. The partner was going to be in the way, he could see that. He drew a deep breath.

"Oh, he's all right," he said. "Last I see of him he was over there a way"—he waved a hand generally toward the distance—"sitting on top of the flivver. You see, he didn't want to catch the train, and I did. I saw it had stopped, so I swam for it. But it looks as if the train had gone on and left you folks right here."

"That damn old engine," said the Pullman conductor, "couldn't drag the weight o' this buggy through the mud. They're going to send back for us from the junction." He eyed the newcomer speculatively. "Was you figuring on riding standard or in the coach, mister?"

The deadhead passenger drew himself up to his full height.

"Standard, of course," he answered. He put one hand in his pocket, looked as blankly as possible, reached into the other pocket. He explored all his pockets, though he knew what was in them.

"Well, of all things!" he exclaimed, and tried to make it sound realistic. "Darn if I didn't take out my wallet just before we spilled; I was going to give my partner some money to get some powder with on the way back. Say, can you take a check? I've simply got to get over to the coast."

The Pullman conductor looked at the wet and dripping man. You could never tell about these people out here. They wore hard clothes at their work—mining, or contracting. He'd seen men who looked like tramps pull out a handful of twenty-dollar gold pieces.

"Tell you what I'll do, mister. I'll haul you to the junction. You can talk to the agent there. Doubtless you're well-known. Thing to do now is get you some clothes. I'll go see if the porter has anything—you stay right here."

"I don't see any flivver with your partner sitting on it," said one of the men, looking out over the endless expansé of water.

"Couldn't see him," answered the deadhead passenger, promptly. "Glare of the sun—like a mirage, you know. The road's over there. It runs along a rise—low hills. But you can't see them. The light reflected from the

water blinds you. It was all I could do to see the train."

The man scanned the water, did find the sun had a peculiar glare. "You're sure he'll be all right?" he asked.

"Sure. Pete's a regular mud-turtle. Likely by now he's located the high-line road and swam for it, and is mushing his way back to camp. Take more than this to bother Pete, it would."

THE Pullman conductor reappeared. "You ought to be pretty well dripped out by now," he said. "George has an extra suit in the galley; you come in and put it on. He'll dry out your clothes. We'll be here three, four hours."

The galley, fortunately, was only large enough for its equipment and one human being at a time. The deadhead passenger thus was able to change from his wet clothes to the "extra suit" and to transfer to its pockets the practically nothing he had in his own pockets—a good knife, a small leather "poke" containing two or three samples of ore and some wadded papers, and an identification coin issued by an accident insurance company.

While he was doing this he bolted a cup of hot coffee, half a cold potato from the tiny refrigerator, which he opened and closed noiselessly, and three pieces of bread that were lying loose in the breadbox. Not much of a meal—but a great help.

Back in the lounge compartment of the hotel car, he entertained the passengers with a brief and reserved account of himself, as if he were a man who did not care to discuss his personal affairs.

He made his account purposely as flat and uninteresting as possible, and presently was rewarded by seeing four of the passengers withdraw for a game of bridge and by noting that others picked up magazines. The man immediately beside him—the ruddy faced one who had first hailed him, produced two cigars.

"Smoke? Let's go up to the front end. They've got a thing up there they call a smoking room. Beats me where the railroad found an old ark like this—must have been dropped off some emigrant train."

The deadhead passenger took the cigar and rose quickly to conceal the trembling in his fingers as he touched the Havana roll. What would he not give for one satisfactory smoke? It had been days since he had soothed his nerves with the fragrant weed. Lately he had even picked up snipes dropped by Mexicans, and a Mexican does not leave much of a cigaret when he throws the stub away.

In the smoking room they found the Pullman conductor. He had a sheaf of fare receipts in one hand and a punch in the other. He glanced up as the two entered, and watched the deadhead passenger as he lighted his cigar and drew at the smoke hungrily."

"Mister," he said, "I was just coming to see you. Rules is rules. I've figured I'd better give you a ticket from here to the junction. Here's your check."

He punched one of the receipts, rose and left.

"My name's Griscomb," said the man with ruddy cheeks.

"Mine's Saunders," the deadhead passenger replied. Realizing what was required, he stretched forth his hand.

"I've been wondering about that friend of yours," said Mr. Griscomb. "Lot of water out there."

"Oh, Charlie's all right."

Griscomb looked out the window.

He reached up and stroked his lips. Then he suddenly glanced full at his companion.

"A little while ago you were calling him Pete."

The deadhead passenger smiled. "So I was. Pete or Charlie—sometimes one, sometimes the other. His name is Charles Peterson. Mostly everybody calls him Pete. When I get to thinking of him seriously I call him Charlie. Great pal he is—and very self-sufficient."

Griscomb looked out the window again. "And you're in mining, Mr. Saunders?"

"Yes—got a little prospect up in the hills. Matter of some twenty or more claims in a row. You know something about mineral? Take a look at this rock."

He reached in the pocket of George's spare suit, drew out the still damp poke, searched in it with his fingers and fished out two small fragments. Griscomb took them, held them in his palm, slowly rolled them over.

There were, here and there, strange, almost transparent, icy looking streaks in the pebbles. Griscomb found his pocket-knife, dug at one of the specimens. It split neatly in half, right down the center of the icy looking streak, without leaving any dust or fragments.

"That's a mighty interesting bit of rock," he said. "What would you say it was?"

The deadhead passenger reached for the samples, restored them to his poke. "You know something about mineral, do you?" he asked.

Griscomb smoked quietly, staring out of the window. Finally nodded his head. "A little, sir. Just a little. Just enough to know that there's none of that stuff within two thousand, eight hundred miles of here. You must have swum quite a way."

THE hotel car did a curious thing, just then. It groaned and shivered just a bit. There was a distinct jar.

Both men looked up—with this difference. Griscomb looked at Saunders, questioningly; the deadhead passenger looked out of the window, and then at the polished wood of the window sill.

He rose swiftly, went to the water cooler tap in the wall on the further side of the small compartment, jerked out one of the paper cups from the holder. Filling it, he crossed back to the window. He poured two or three of the drops on the polished sill.

Griscomb, who had watched all this, now watched the drops on the varnished surface. They trembled, as if surprised at their sudden freedom, and very slowly began to roll toward the front of the car.

"Track's washing out," said the deadhead passenger. "Little more and she'll roll off into deep water."

Griscomb half rose from his chair. The deadhead passenger pushed him back in his seat, ran out into the aisle. Griscomb heard the slamming of the vestibule door.

Griscomb jumped up, ran to the front end of the car. On the platform he found the porter, wringing his hands as he looked out the opened side door.

"De gen'man, dang nab him, he's done jumped into de watah wif my extry suit on," he said.

"Jumped into the water!" exclaimed Griscomb.

"Yes, sah. I guess he must ha' done gwine crazy, fo' he's under de cah."

Griscomb could hear something

splashing around, then something thudding, while ripples of water circled out from beneath the body of the Pullman. Then the ripples died away, and the deadhead passenger appeared once more, with George's extra suit a sad-looking object.

"It's all right now," he said calmly. "I jammed a plank under the wheels for a trig."

The Pullman conductor, drawn by the commotion at the front end of the car, joined the porter and Griscomb on the front platform. He gazed out at the dripping deadhead passenger, and at George's extra suit.

"What the hell now?" he demanded. "You gone nuts?"

"Current's washing the embankment out," said the dripping man, standing in the water where the desert ought to have been. "Track's settling. Your old wagon was started for deep water. I got a plank and jammed it under the rear truck; that'll hold her for awhile."

He paused, looked around, laughed briefly. "Well," he said, "I can see where you and the boys get their feet wet. Got a pinch-bar aboard?"

The Pullman conductor regarded the deadhead passenger with steady eyes. "How'd you know there was a plank?"

"Don't waste time asking silly questions. You want to save your car, or wait an' see if it will float?"

GRISCOMB was staring from one to the other. A frown creased his brow. He knew some things, and among them was the knowledge that a Pullman would float just about as well as a chunk of lead.

The Pullman conductor also appeared to have knowledge. Without waiting any longer he swung down the steps, revealed by the trapdoor the deadhead passenger had lifted, and, uniform, pants and all, stepped into the water. He strode off, splashing through the water, up the track and away from the car. The deadhead passenger followed him.

Griscomb and the porter, watching, noticed that the two men seemed to be getting rapidly into deeper and deeper water. Suddenly the Pullman conductor pitched forward. The track was washed out here. His companion caught him. The two stood closely for a moment.

"You know your onions," said the Pullman conductor, very quietly. "Let's go back."

"You got a pinch-bar on her?" asked the deadhead passenger.

"Brother, damn if I know. They's a locker under the rear end—likely you noticed it when you was under there. It's supposed to have tools in it. These hotel cars, they were built in the old days. They were supposed to be equipped for trouble. I suppose there's the usual tin ax in it, a soft lead maul, one saw with unfiled teeth, and one jack without a handle to work the screw. An' forty feet o' chain. I seen more chain about a railroad—seems everybody thinks chains are all you want."

"Let's go see," said the deadhead passenger. "Watch your step, hug close to the wagon. Swim?"

"Nary a stroke."

They sloshed to the rear of the car. Passengers, noting the commotion in the water, went out on the observation platform and leaned over the brass rail. They were amused to see one youngish man in a borrowed suit and the Pullman conductor, in much blue and gold braid, wading in the flood. The two disappeared under the car.

"Locked, padlocked, by Gad," they heard one voice say. "You got keys?"

"I got forty-eleven keys," said the other voice. "Out of the way and let a man try."

The ripples rolled out from under the car—as did a constantly rising stream of profanity. Finally the deadhead passenger appeared and looked up at the faces peering over the brass rail.

"One of you folks please ring the bell for the porter," he commanded. George appeared.

"George, you got a can-opener, or a hammer, or anything we can bust a padlock with?"

The porter disappeared, to return presently with a meat cleaver. "Boss, that's all the tools I could find. An' say, boss, be as caiful o' that extry suit o' mine as yo can, please. It's all I done got to weah when I get off the cah."

"Don't worry, George—it'll be a long time before you get off the car, unless you swim for it."

The deadhead passenger disappeared under the car again. There rose a mighty clanging and clanking. Occasionally a piece of the meat cleaver flew out in a silver arc and plopped into the murky flood. The hammering continued, and suddenly there came a satisfied sigh.

"What'd I tell you," said a voice. "Chain!" There followed a great clanking and splashing as no less than fifty feet of chain was dragged out and spilled into the water. Then a banging and groaning and heaving, as sundry tools followed the chain.

"Two picks, one shovel," tallied a voice, filled with disgust. "One screw jack. I suppose that's a crosscut saw. A fire-hose nozzle, but no hose. What in hell's that? Godfrey, a sack o' spikes. The guy that loaded this must ha' thought they was goin' to build a railroad. There's a maul, too. And a level. Huh, we can use that to see how much grade we develop."

"Shut up, they'll hear you," said the other voice.

NO further remarks for a while, only the thudding sounds. Then a brief silence, after which the first voice asked: "You reckon that plank'll hold? For how long?"

There was a scrambling, and the deadhead passenger reappeared. He climbed up onto the observation platform, waving the passengers back as he spattered water all about. He gripped the brass handle of the ratchet brake, kicked one wet foot against the catch at the floor level, and began putting on the hand brakes.

Water flew all about as he threw his form back and forth, and the passengers retreated inside the door. The Pullman conductor climbed up and helped him with the last two or three twists on the ratchet handle.

"That ought to hold her for a while," he commented.

They stood, resting for a minute. The deadhead passenger drew a deep breath.

"That jack's got a screw action," he said then. "Do you suppose the ties will hold?"

"The ties hold? What you mean?"

"Jack the wagon back. We can make six inches at a time with the jack. The water'll lubricate it and make it work easy—after the rust gets loosened good. You don't want to leave this wagon on the end of a washed-out embankment, do you?"

The Pullman conductor put a dripping hand to his brow, and smeared silt all over his face. "That's an idea,"

he said. "But think of the work it'll take, and the time."

"Time? We've got lots of time. Let's climb down again and walk up the track and see how it looks."

The passengers saw the two go overside again, and watched them amble off through the water. They seemed to be kicking unnecessarily as they walked. Once the Pullman conductor strayed out almost up to his arm-pits as the deadhead passenger held his hand.

Something out there seemed to interest him. They slopped around in the wet for five minutes, then returned, to disappear under the car. Then they could be heard sloshing along the side of it, only the tops of their heads visible from the windows. They disappeared under the rear platform. Presently the Pullman conductor reappeared.

"George," he shouted, "go back an' kick that brake off."

The car crept back an inch at a time. The passengers did not notice the motion at all. There was nothing to gage the movement by. Sometimes the Pullman conductor, now thoroughly sopping, was visible; sometimes the deadhead passenger. Every now and then a dull thud would sound under the car, as if somebody were throwing something against it. It was either the conductor or the man in George's extra suit slamming the plank under the truck wheels at intervals when the jack was moved along from one tie to the next.

Mr. Griscomb, who had been pacing back and forth in the car, suddenly gave a snort. "By gosh," he exclaimed, "now I see!" And hastened to the rear platform, down the steps and into the water.

"Hey, you boys, let me help you a bit," he said, as he crouched under the car.

GEORGE served a dinner. There was no ordering, there were no checks. "Dis am on de company," George explained. "De conductah, he say it ain't yo fault yo is out here."

Later the Pullman conductor, the deadhead passenger and Mr. Griscomb ate on the rear platform, where George had rigged a collapsible table. They ate in wet clothes, with wet and dirty fingers—and they ate plenty.

"George," said the conductor, "break open a box of cigars. I'll sign for 'em."

Still later George touched the deadhead passenger on the shoulder. "Sah," he said, "yo clothes am dry now—ef yo want to change. Den, sah, I can dry out dat suit ob mine."

Once more in his own raiment, rough and ready and somewhat wrinkled, the deadhead passenger strode through the car and out onto the observation platform. He unfolded a campstool, sat down upon it, and heaved his feet up onto the brass railing.

Taking a cigar from his pocket, he lit it, drew a satisfying puff, and leaned back. Over on the horizon a golden moon was peeping above the water, sending out silvery rays of light to play upon the slight ripples and eddies of the slow but ever-moving current.

The girl with the golden hair and wonderful eyes stepped out onto the platform and sat down. She reached into a foolish little bag she carried and found a cigaret.

"Have you a match?"

The deadhead passenger had one. He struck it, held it for her. Then he snapped it overboard as the cigaret glowed in the half light.

"You're quite a hero," she said. "Father says you saved us all from being drowned."

"Your father is mistaken, Miss Griscomb."

"But you knew how to move it ahead when there was no engine."

"A simple problem, Miss Griscomb."

"Father says you and the conductor were pretty near all in when he went down to help."

"Your father was a great help—I am sure we appreciated it. I hope he's not—"

"He's all right. He's just gone to bed while the porter dries his clothes. Father makes it a point to keep himself fit."

THE deadhead passenger smoked, looked out into the night. He knew one of the loveliest women he had seen was at his side, that the moon was shining down upon them. But he also knew other things—about himself. He clenched his hands.

"Mr. Saunders," she said, "won't you tell me about yourself?"

"Certainly, Miss Griscomb. Thirty years old, a graduate of civil engineering. Know something about metallurgy. Didn't believe all I read in the books and came out here to see if the books were right. Found out that they were wrong. I've got some claims up there."

"You mean you found gold?"

"No, cryolite. The books say there isn't any except in Greenland."

"What's cryolite?"

"A sort of aluminum ore, Miss Griscomb."

"Yes?"

"Yes. I found a pocket of it. Of course somewhere above there's the main lode. The pocket has been broken off, perhaps by a shift of the earth's surface."

"Yes?"

"That's all. I was looking for the main lode. Then somebody came along and staked out a railroad. Just why a railroad in those hills, I don't know. They've bought the land. Rather puts me out, you see."

The moon rose higher, the night grew more lovely. The water was crossed by silvery paths. She had a perfume, a faint and delectable kind, and a vagrant breeze blew it to him. He clenched his fists again.

"I saw you in the town back there, I think," she said. "Where the railroad ends. Father and I were waiting for the train. I thought I saw you pick up a cigaret somebody had dropped."

He gritted his teeth. She was telling him. But he forced a laugh. "I thought it was a piece of paper the man dropped," he said. "I always pick things like that up."

"Mr. Saunders, are you broke?"

The question was the last straw. He flung the cigar into the water, turned and faced her. His mouth was ugly.

"Go ahead, rub it in," he said. "You damned butterfly. Well, I am broke. I've got more brains in my head than you'll ever have if you live to be a thousand years old. I came out here to start over again. One thing after another happened.

"And then I found this cryolite. Just the pocket of it, but I knew I had the world by the tail then. If I could find the lode. And this railroad had to come. Well—I'll make a stake, anyway. Know what I've done? Filed a string of claims, in the passes, as nearly as I could judge, where the railroad will have to break through the hills.

"Of course, no railroad wants to

have a mine under its line. Make the track unsafe. So I hopped this rattler to get over to the coast, where I've got a friend who's a lawyer. I was so low, down and out, I was swiping snipes in the street back there, and I beat it out of town on the rods under this old joke of a hotel car.

"Well, sit there and laugh at me. You've never known what it was to be broke. You just have to look beautiful and lovely, with those eyes and your hair, and your mouth. Made for kisses! If I had even a dollar in my jeans, I'd call myself a gentleman and I'd kiss you! But, lady, I'm a bum."

He turned and stared savagely out over the silvered water at the great, soft moon.

"You kiss me?" she asked.

Suddenly he did. The girl clung to him a moment; then without another word she arose and turned inside.

SHE was gone. He sat looking at the water. His conduct was inexcusable, he knew. Flushes of shame mounted to his cheeks. But she had no right to ride him like that. He jerked another cigar from his pocket—he had taken a handful at the dinner when the Pullman conductor broke out the box—and lit it. He puffed vigorously, staring out for a long time at the water.

Finally he made up his mind. Only one thing to do—get out and swim for it again. Probably there was track the other side of the break in the embankment. As he rose, the door from the car opened again.

Mr. Griscomb came out, a somewhat ludicrous figure in his bathrobe. The deadhead passenger rejoiced—the one thing he needed now was a good fight.

Griscomb came up to him, looked him squarely in the eye.

"My daughter tells me you kissed her," he said.

The deadhead passenger's head went up. "She asked for it," he replied, biting off the words sharply.

Griscomb looked at him with hard, boring eyes.

"My daughter Beatrice tells me you're an engineer, that you found that cryolite you showed me up there."

The deadhead passenger sneered. "She has more brains than I gave her credit for," he said. "I didn't suppose she could remember all that, especially the name of the ore."

Griscomb suddenly laughed. "Beatrice is a pretty good judge of human nature," he said. "She knows people. Listen, young man, it's my railroad that's building through the hills. I came up here to see that the deeds were O. K. I'm looking for an engineer with brains. Incidentally, I'd be willing to back a real find of cryolite. Would you consider a job with my company?"

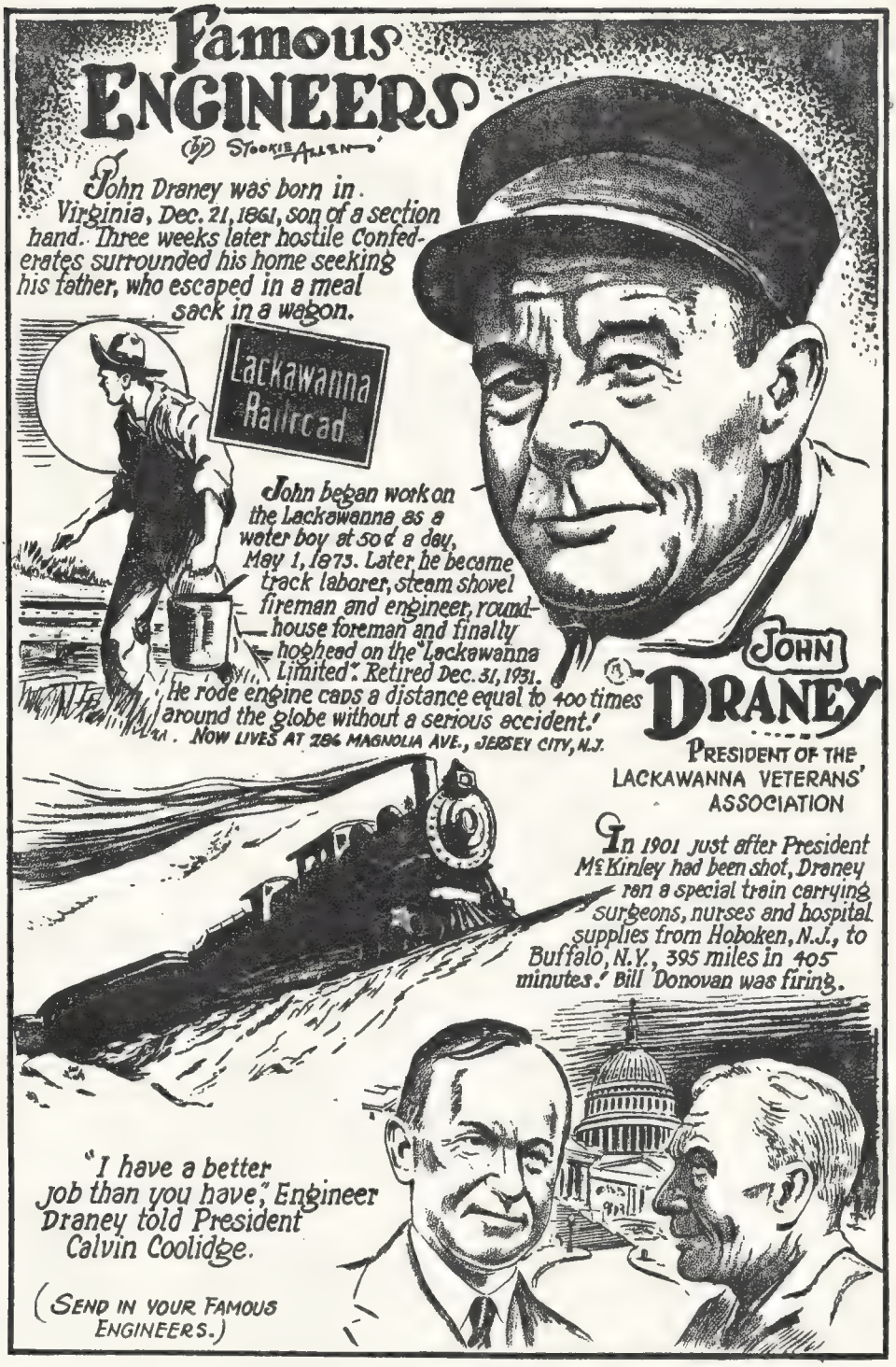
The deadhead passenger felt suddenly weak. He swayed, found himself sitting on the campstool again. The moon was going round in circles in the sky, and the brilliance of the silvery water dazzled his eyes. Something struck his knee, and he looked down to see that it was Griscomb's hand.

"Want the job?"

The deadhead passenger closed his eyes. Saw a face with bright eyes, golden hair. He opened his eyes and put his hand on Griscomb's as it rested on his knee.

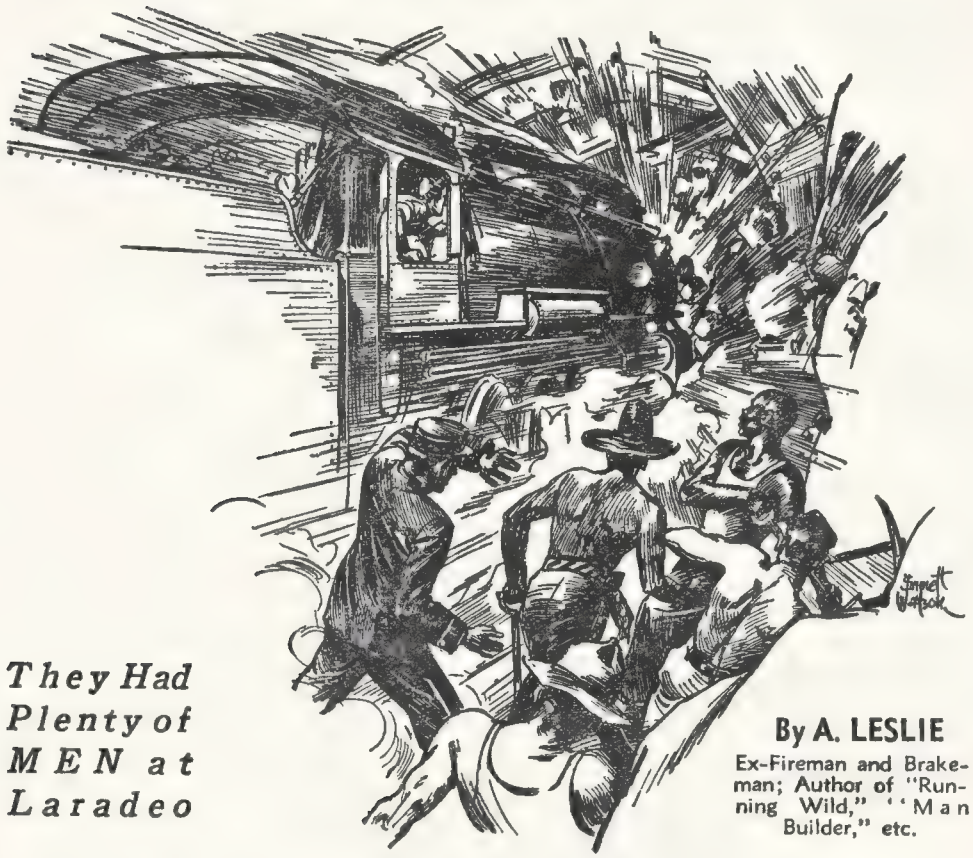
"Boss, you've hired somebody," he said. "I don't ask what the salary will be, or the work."

Griscomb slapped him on the back. "Well," he said, "I know this much: I've hired the best man I've ever picked out of the ditch!"


Famous ENGINEERS
By Stookie Allen
John Draney was born in Virginia, Dec. 21, 1861, son of a section hand. Three weeks later hostile Confederates surrounded his home seeking his father, who escaped in a meal sack in a wagon.
Lackawanna Railroad
John began work on the Lackawanna as a water boy at 50¢ a day, May 1, 1873. Later he became track laborer, steam shovel fireman and engineer, roundhouse foreman and finally hoghead on the "Lackawanna Limited". Retired Dec. 31, 1931.
He rode engine cabs a distance equal to 400 times around the globe without a serious accident!
NOW LIVES AT 286 MAGNOLIA AVE., JERSEY CITY, N.J.
JOHN DRANEY
PRESIDENT OF THE LACKAWANNA VETERANS' ASSOCIATION
In 1901 just after President McKinley had been shot, Draney ran a special train carrying surgeons, nurses and hospital supplies from Hoboken, N.J., to Buffalo, N.Y., 395 miles in 405 minutes! Bill Donovan was firing.
"I have a better job than you have," Engineer Draney told President Calvin Coolidge.
(SEND IN YOUR FAMOUS ENGINEERS.)

Next Month—John Gulmyer, of the Lake Shore

Railroaders All



They Had Plenty of MEN at Laradeo

By A. LESLIE
Ex-Fireman and Brakeman; Author of "Running Wild," "Man Builder," etc.

"C'MON, Crowbait! C'mon, Sugarfoot! This way, ev'body—give it to 'em!"

Whirling a track gage over his head and bellowing encouragement to his dusky followers, Jumbo Jackson galloped to the fight. The Mexican members of the rival section gang, as eager to do battle as the brawny Negroes, yelled curses in English and Spanish.

Pick handles thumped on hard skulls. Fists whacked against black or yellow countenances, tough as leather. Half a dozen combatants were quickly on the ground.

Hogheads in engines scattered over the big yard slammed on the air, leaned from their cabs and whooped encouragement. Brakemen skipped across car tops to obtain a better view. Railroading was at a standstill.

Jumbo Jackson mowed a swath through the opposition, his mighty arms working like pistons. He reached the outer fringe of conflict, turned and lumbered back again. A pick handle bounced from his big head as from a boulder. Jumbo seized the man who wielded it about the waist and tossed him aside.

Into the uproar dashed two Irish

section foremen, some yardmasters and several husky yard conductors.

By main strength and profanity the two gangs were parted, glaring and muttering. The section foremen waved their arms and cursed, while the yardmasters and cons turned their attention to the idle train crews.

"It's enough to drive a man crazy," declared Terence O'Doone, who bossed the colored outfit, to Mike Hanlon, foreman of the Mexicans. "Can't you by any chance handle them greasers of yours and keep them from startin' these rows?"

"And you're tellin' *me?*" shouted Hanlon. "Why, you flannel-mouthed flatfoot!"

"Here! Here!" sounded a voice of undoubted authority. "What the hell is going on now? O'Doone! Hanlon! I'm about fed up with these riots. Get your men to work and don't let it happen again."

O'Doone and Hanlon faced a stocky, broad-shouldered old man with a crinkly white mane and a pair of eyes as blue and cold as ice.

"Yes, sir!"

Picks and spike mauls began to click. The old man rumbled deep in his throat, frowned impartially on the two outfits and stalked back to a long private car that stood on a nearby siding.

"That brass hat looks to me like big trouble," said Jumbo Jackson, caressing a good-sized lump back of one ear.

"Boy, you done said it!" mumbled Sugarfoot Clay. "Friday-the-thirteenth and Groundhog Day all rolled into one! That's the general manager of this whole C. & P. railroad. Boy, that's 'Jaggers' Dunn!"

The Mexicans evidently felt the same way about the general manager, so for the remainder of the afternoon peace reigned. But it was the calm before the storm, and everybody sensed it.

"It's the climate's to blame," declared Terence O'Doone. "This Pacific Coast country ain't no fit place for buildin' railroad."

O'DOONE may have been right in his diagnosis, but the fact remained there had been bad blood between the two section gangs. It dated from the day they had begun work together on the big yard the C. & P. was extending at Laradeo. Clash after clash had culminated in the day's near-riot. O'Doone was worried, and so was Hanlon. Their personal differences forgotten, they sat in the latter's quarters that night and discussed the situation at length.

They would have been the more perturbed could they have listened to the conversation going on in the big frame shack occupied by O'Doone's dark-skinned "gandy dancers."

"'Bout time we was startin'," Jumbo Jackson was telling the other occupants of the room; "don't make no noise. Get plenty of rocks and hold 'em till I tell you to let 'em go."

The big Negro led his companions down a dark lane between two strings of boxcars. He carried something bulky. His followers' pockets were filled with chunks of ballast.

A quarter of a mile distant from their own was the shack that housed the Mexican gang. It was dark and silent when the Negroes reached it. They squatted in the shadow of the boxcars and eyed the wooden building. Then Jumbo and Sugarfoot crept forward.

Against the dry boards of a corner they heaped the oil soaked cotton

waste Jumbo carried. A match flared, flickered. There was a sudden leaping glow.

Back to their companions scuttled the firebugs. "Hold your rocks till they start runnin' out," Jumbo hissed, "and don't make no wild pitches!"

Up the side of the building rushed a sheet of flame. The watching Negroes exhaled their breath sharply, gripped their stones.

"Why for they don't come out?" whined Little Bit Mason. "They all dead?"

The roof of the building was well afire now. The watchers were milling uncertainly. Crowbait Jones let out a sudden whoop:

"What's that light up the track? That another fire?"

Jumbo turned and gazed back the way they had come. A red glare was crawling up the sky.

A tongue of flame soared above the tops of the boxcars. Jumbo swore.

"Boys, we done been foxed! Them greasers done set *our* camp on fire. They ain't none of them here. C'mon, you high-browns!"

Midway between the shacks the two gangs met. The battle of the afternoon was but a mild rehearsal for this one. Several men were laid out and it required the help of railroad and city police to quell the disturbance.

The wounded were stitched and bandaged. Some camp cars were hurriedly conditioned and the black and yellow warriors were herded to bed. Quiet resumed, broken only by occasional groans or weird cuss words.

IN his private car, General Manager Dunn said things to Hanlon and O'Doone.

"This settles it," he concluded. "I'm going to fire the lot. Just as quickly as I can get a gang of Swedes from Chicago we'll let both outfits go. No more black boys and no more greasers on this road."

"My colored fellows are mighty good workers," ventured O'Doone.

"And for building railroad, my Mexicans can't be—" Hanlon began. Jaggers Dunn interrupted.

"Maybe so; but we can't put up with riots and burnings. If their skulls were not made of iron some of them would be dead already. No, there isn't any use to argue; they can't get along together and that's all there is to it. I'll have the Swedes here by the first of the week."

The plan was supposed to be kept secret, but like most secrets it leaked out. Before noon of the following day both outfits knew of the general manager's ultimatum.

"I sure feel powerful low," mourned Crowbait Jones that night, his long legs swinging from an upper berth in the camp car. "This is a good job, and good jobs is hard to come by these days."

"You said it," agreed Jumbo Jackson. "They don't grow on trees no more. Them greasers are to blame for it all, too."

In the Mexicans' car, pessimistic conversation also prevailed.

"*Caramba!*" growled Felipe Martinez, the tall straw boss. "It is not right. We work hard. We like the job and we give our best. Those black sons of perdition—it is them that are at fault."

Trouble brewed—trouble of a more serious nature than any preceding.

JUMBO JACKSON was the first to awake that night. Crowbait Jones, a native of California, the first to realize what was happening.

His eyes snapped open, straining to pierce the dark. He gripped the sides of his bunk as the camp car rocked drunkenly. For a moment he thought an engine had coupled onto the string and was shifting it to another track; but he instantly realized this could not be so. No fussy yard engine, ambling down a lead, could impart such motion to the cars. Jumbo hit the floor, shouting:

"Turn out, black boys, somethin' done gone wrong!"

They were already turning out, groping for overalls, voicing startled questions. Outside could be heard a crashing. Someone flung the door open. Jumbo leaped to the ground.

Instantly he was flung headlong. He scrambled to his feet and immediately went down again. Wails of terror sounded as the same mysterious fate overtook his companions. Crowbait's voice rose in a howl of understanding:

"She's an earthquake, boys, that's what she is! Good Lawdy! Look what's goin' on up town!"

From where the camp cars stood an excellent view of the business section of the city was to be had. Outlined by street lights and a high-riding moon, tall buildings were seen to reel and sway. Great masses of masonry crashed down. Bricks rained into the streets. A ponderous structure dissolved like a house of cards. A cloud of smoke mushroomed into the air. Instantly red lances of flame were stabbing through it.

"Jedgment Day!" shrieked Little Bit Mason. "On your knees, sinners!"

In the stricken town arose the moan of fire truck sirens, the trilling of police whistles, the clanging of ambulance bells. The grind and grumble of the rocking earth provided a fitting undertone for the awful symphony.

Through the uproar, like the mellow notes of a French horn, boomed the voice of Sugarfoot Clay:

"Oh, de earthquake shook and de dark come down,
And de graves dey opened wiff an awful soun'!
Oh, de cryin'! Oh, de cryin'!"

"Shet up!" ordered Jumbo Jackson. "This ain't no time for to be singin' spirituals. There's work for us to do. Get t'gether, all of you. Line up, now. We're safe down here—ain't nothin' to fall on us."

"I'm sick!" wailed Little Bit. "Worser'n bein' on a little ship in a big storm!"

"You'll be sicker if I single-foot over there after you!" Jumbo told him. "Hah! Here comes the Big Boss."

It was General Manager Dunn, hatless, coatless, his blue eyes flashing. "Men," he snapped, "the river's dammed and is backing up. Unless we cut a channel the whole yard'll be flooded. This yard will be badly needed to handle food and supplies. Grab your tools and come along."

ORDER succeeded chaos. The bewildered Negroes recognized a leader and were glad to follow one. The earth still shook, but the tremors were growing less violent. The prospect of action steadied the men's nerves.

"Here come the Mexicans!" exclaimed Sugarfoot. "Mr. Hanlon's bringin' 'em."

"No fightin' t'night," cautioned Jumbo. "Plenty trouble here without us makin' more. We'll settle their hash t'morrow."

Cutting a channel for the dammed river, little more than a creek though it was, proved to be a hard job and a mean one. Recurrent earth shocks un-

did the work accomplished and the rising water made the task increasingly difficult. Black men and yellow men shoveled and picked and cursed, straining shoulder to shoulder to defeat the unleashed elements. Jaggers Dunn was everywhere, encouraging, directing. His tireless energy and flashing courage inspired the workers to miracles of accomplishment.

A cheer went up from the perspiring laborers. The water had burst through its weakened barrier and was rushing into the lower bed of the river, widening the channel every second.

Dunn wiped his mud streaked face on his sleeve and clambered up the bank. Somebody on the track above was shouting his name.

"All right," he called. "This way."

A wild-eyed yardmaster rushed up. Dunn listened to his terse story, shot a question or two. His great voice rose above the rush of river water.

"Men, both ends of Blue Hole tunnel have fallen in, and there's a passenger train caught in the tunnel. It's up to us to get those passengers out."

Followed a dead silence, then apprehensive mutterings. Blue Hole tunnel was a crooked burrow that ran for nearly a mile through a low hill. It was not a modern concrete lined tunnel, its sides and roof being shored with timbers. Dunn, rapidly improving this recently acquired C. & P. feeder, had planned to replace the dubious construction with a cut.

No wonder the section men muttered! Cutting a channel for the river water was one thing: digging into that enlarged badger hole, with the earth still shaking and threatening to any moment bring down the whole hill on top of them was another.

"*Dios!*" exclaimed Felipe Martinez. "It is asking too much. Besides, why should we who are soon to be discharged risk our lives in such work?"

That settled Jumbo Jackson.

"Are you a railroad man or ain't you?" he demanded. "They's people dyin' in that tunnel!"

He turned to his dark-skinned fellow workers: "Come on, boys, we'll show these gandy dancers what real men are like!"

"*Maldito!*" spat Martinez. "This *is* too much! *Hombres,* are we to be shamed by these children of darkness?"

A grin twitched Jaggers Dunn's white mustache as he led the scramble across the yard; but there was a fighting light in his blue eyes.

On the eastbound main stood an engine and a string of flats. The superintendent of the Laradeo Division was there.

"Tracks in bad shape," he told Dunn, "but maybe you can make it by train—part of the way, anyhow. Do you think you can dig into that tunnel?"

"Got to," replied the G. M. "All right, boys, climb on."

OVER the twisted and out-of-line track sped the great engine, Jaggers Dunn in the cab. The speed at which they snaked the bouncing flats along evoked protests and curses from his passengers. Mile after mile. Around a curve they boomed, siderods singing a mad song. The exhaust was chopped off. Air screamed through the brake valve. Over came the reverse lever. The stubby stack pounded again, shooting out clouds of black smoke and clots of fire. The drivers, working backward, spun madly.

Directly ahead and only a few hundred yards distant there was no track; only twisted rail ends and scattered

ties. The full force of one of the shocks had struck here. A tall embankment sloped steeply down to jagged fangs of rock. Straight for this chaos of destruction rushed the loaded train.

Her pilot overhanging the twisted rail ends, the engine was brought to a stop. Instantly Dunn was on the ground, bawling orders.

"Grab your tools; we've got to hoof it from here. Less than half a mile to go."

Over the split and tumbled earth he led the way. Behind came Negroes and Mexicans, jostling each other in their eagerness.

Before them loomed what had been the mouth of Blue Hole tunnel. It was now a mass of raw earth and jumbled stone that had crashed down from the face of the hill. Through the upper portion of the heap drifted wisps of smoke.

"Air's getting into the tunnel, anyhow," muttered the G. M. "That smoke's from the engine. Maybe we'll be in time. Must be mighty bad in there, though. Hop to it, boys!"

Picks thudded. Shovels clanged. Hurled by stout arms, huge rocks rolled down the embankment. Almost instantly, it seemed, the section men had cleared the loose rubbish away and were boring in under the crumbling tunnel roof. From time to time the ground under their feet undulated gently and bits of dislodged earth showered down upon them.

"Come one of them big shakes and we're gonna get squashed flat as rats under a sugar barrel," muttered Little Bit.

"Won't have to bother with no grave diggin', then," Jumbo Jackson told him. Felipe Martinez, straining at a crowbar nearby, chuckled and showed his white teeth in a quick smile.

"Flowers already growing on top of us, too."

"You said it, high-pockets," agreed Jumbo.

DUNN inspected the hill, and something he discovered caused his brow to draw together in a worried frown.

Yawning in the faint light of approaching dawn was a wide fissure that apparently ran clear across the hill. It paralleled the tunnel, at no great distance from the west wall, and in the gloomy depths Dunn could hear the swish and gurgle of water.

Some subterranean stream or reservoir was seeping into the fissure. If the growing pressure were to burst the wall of the nearby tunnel, the occupants of the stalled train would drown like mice caught in a plugged drain. Dunn scrambled back down the slope and dived into the tunnel mouth.

Already the workers had progressed some distance. They were not attempting to clear the entire tunnel, but were driving a sloping walled passage along the westbound main. This would let the passengers out. If the train itself could not make it, it would have to wait. Jaggers Dunn examined the tunnel wall and his frown deepened.

The wall was moist and sticky. Little streams of water were trickling through. A slight tremor weaved the tunnel floor and the water trickles increased appreciably.

In a few brief sentences he outlined the situation to the workers.

"Got to step on it," he concluded. "If that water breaks into the tunnel, it's final orders for those people in there."

Faster and faster flew the shovels.

The picks quickened their tempo. Streams of earth and rock flowed from the tunnel mouth and down the embankment. But faster and faster also came the trickles of water. Something was going to happen soon.

"Oughta be gettin' close now," declared Jumbo Jackson, "more smoke comin' through. You hear anythin', Crowbait?"

Jones shook his kinky head. "Don't know what about smoke," he replied, "but there sure is a lot more water comin' through. We don't look out, we all gonna get drowned, Jumbo."

The passage had been driven nearly a score of yards into the tunnel, and now faint sounds could be heard on the other side of the fallen rubble.

"They're alive, some of them, anyway," exulted the G. M. "We're going to get through in time."

But even as he said it, his anxious gaze strayed to the tunnel wall. Men had been detailed to bank earth and stones against places that showed an alarming flow of water. Dunn added several more to their number.

DISASTER struck. A sudden split in the earth between timbers, a clatter of falling rubble. Then a gush of water cold as ice and black as ink.

Jumbo Jackson, Martinez and half a dozen others leaped to the danger spot; clouds of earth flew from the shovels; boulders were hurled into the crevice.

The efforts were of no avail. The break had occurred in a softer stratum of the wall.

"We need sandbags, heavy timbers, big stones," Dunn shouted, looking frantically about. Nothing of the required nature was at hand.

The torrent of water increased in volume. The earth and stones with which the gandy dancers sought to dam it were whisked away before they settled into place. It was but a matter of moments until great sections of the tunnel wall would come crashing down, undoing all the work that had been accomplished, sealing the doom of the men and women imprisoned in the vault.

"We've got to have something heavy for a plug," yelled the general manager. "Outside, four or five of you, and find something!"

"Here's somethin' heavy for you!"

A great glistening black figure, naked to the waist, plunged through the turbid water. There was a swirl of spray, and the torrent died to spurts and trickles.

His mighty back wedged into the crevice, brawny arms outstretched to grasp a shoring timber on either side, Jumbo Jackson stood. His tree-trunk legs, braced solidly against the crumbling earth, quivered with strain. His shining black face was contorted with an agony of effort. But he stood there without flinching.

"Pile dirt and rocks around me," he gasped. "Hustle up, you snails! I ain't posin' for no picture!"

Madly the section hands worked. The rubble rose swiftly about Jumbo's legs, jamming him farther back against the icy flood, entombing him in a grave of muck.

"Don't build it no higher," he gasped when the wall had risen to his heaving chest. "Can't breathe if you do. Jest stuff shirts and things in around the sides. I'll hold her while you dig the tunnel out."

Again the blockade was attacked. Gasping with effort, Mexicans and Negroes shoveled and picked and strained. Strange curses and snatches of prayer sifted through the smoky

dampness. The devoted crews toiled on. From the figure in the crevice arose a soft, melodious croon:

"Petuh sleep by de Gahden gate,
Sleep while his Marster pray an' wait,
An' Judas creep 'long de Gahden wall,
Creep whah de blackes' shadows fall.
'Petuh! Folluh yo' Lawd!'"

Arms outstretched, head flung back, the great black stood calm. The slowly settling rubble was tearing his mighty frame. Over his heaving breast seeped scarlet streams to mingle with the water glistening there. Through his lips again came the low song:

"Mah Lawd he weah a crown on de Tree,
Crown ob thohns foh yo' an' me;
Still Rivah! up in de sky—
Mah Lawd he comin' by an' by!"

WORDLESS, the general manager stumbled back to urge his staggering men to greater effort.

Now voices could be heard beyond the barrier. Questions and suggestions were called by those imprisoned; but the grim workers had no time for talk. Felipe Martinez suddenly shouted loudly and joyfully.

The Mexican's crowbar had plunged between two stones at which he had been prying. It slipped from his hands and he heard it clang against steel. Then Little Bit's pick forced an opening through which gushed smoke and foul air.

"You've won, boys!" exulted Jaggers Dunn.

Swiftly the opening was enlarged. A man in a conductor's blue uniform plunged through. He recognized the general manager.

"Shall I get the passengers out of the coaches, Mr. Dunn?" he asked.

"Anybody hurt?"

"Not seriously. Few bruises here and there. Smoke was mighty bad at first, but it's cleared up some."

"All right," ordered Dunn. "Get them out. We'll—"

His lips continued to move, but no one heard the words. His voice was drowned by a mighty and awful sound that thundered in the depths of the earth beneath their feet. The tunnel floor undulated. The timbers ground together. A crash echoed from the tunnel mouth.

Stilled to a mutter, the voice of the quake died away. The movement under foot ceased. Screams of the terrified passengers filled the air. The section men were too tired to raise their voices.

Dunn ran to the tunnel mouth. A glance as he passed the crevice assured him that Jumbo Jackson still stood erect.

A score of feet from where should have glowed the square of daylight marking the tunnel mouth, Jaggers halted. Directly in front of him was a mass of earth and stone, stretching from wall to wall and from floor to ceiling. Again the tunnel roof had fallen. This time it had imprisoned the rescuers.

"Another shock and we're done for," Dunn growled. "And it will come—another one always follows. No time to dig out. Water will get us, if nothing else. Other crevices are opening."

The situation seemed hopeless.

"Hold out a little longer, big fellow," he flung at Jumbo Jackson as he rushed past. The chant followed him:

"Lawd, I's ready foh de Jedgment Day—
De Blood done washed mah sins away—"

"Clear the rest of this trash off the track here," Dunn shouted to the

section men. "Then get back along the train, in the clear."

INTO the engine cab the general manager climbed. Huddling beside his seatbox, the hoghead stared in open-mouthed astonishment. A glance showed Dunn there was plenty of steam in the boiler: the fire had been banked to prevent undue smoke.

"Get down there and cut this engine loose," he told the engineer. "Go back and help him," he ordered the fireman.

Swiftly the enginemen obeyed. Dunn had been an engineer himself, back in the old days. He heard the pop of the parted air hose, the clang of the rising pin. He glimpsed a hand waving a highball.

He slid the reverse bar down into the corner, opened the sand blowers and cracked the throttle. The drivers turned over; the stack boomed wetly.

Men were streaming past the engine. Jaggers, peering through the gloom, recognized his section hands. Felipe Martinez looked up at the cab. Close behind came O'Doone and Hanlon.

"Everybody here but Jumbo, Mr. Dunn," called the former.

Back came the throttle lever. Clouds of smoke ballooned along the tunnel roof. Straight for the tunnel mouth thundered the great passenger engine.

She hit the tracks where the fall had rested. Her drivers slipped. Dunn breathed a prayer; but not for himself. It was for the soul of the black man whose heroism gave them a fighting chance for life. Then the locomotive hit the fallen roof.

Although he was braced against the boilerhead, Dunn was hurled forward. He clung to the reverse bar as the engine bucked and leaped and lunged.

Earth and stone and ponderous timbers were hurled forward. There was a final mighty concussion, a blaze of light. Out of the tunnel howled the stricken engine. Over on her side she went and down the embankment. Dunn hurled himself through a window and struck the earth.

Bruised and bleeding and groggy, he picked himself up. For an instant he stood uncertainly. Then he staggered into the gloom of the tunnel.

The passenger conductor was a man of action. He had emptied the coaches and was herding the people toward the tunnel mouth. Weeping or laughing hysterically, they streamed out. Some of them noticed the awful form of Jumbo Jackson and cried out in horror. Last of all came the section crews.

"All out but six men," shouted the general manager. "That's enough! That's enough! I don't need all of you! Hanlon! O'Doone! Get the rest out!"

Tall Felipe Martinez and brawny Sugarfoot Clay tore into the wall of muck that imprisoned Jumbo. The others stood ready for instant action.

Down came the rubble. The stones were hurled aside. Jumbo fell forward into the arms of the general manager. Over both poured the released flood. White man and black were swept to the ground.

But strong hands were ready. They were jerked to their feet, Jumbo was limp and silent. Sugarfoot and Martinez lifted his great weight between them and bore him out into the sunlight just as the earthquake's awful voice spoke once more, and Blue Hole tunnel collapsed from end to end.

JAMES G. "JAGGERS" DUNN, general manager of the great C. & P. railroad, sat in his private car writing a telegram. He chuckled as a

rich voice floated in through the open window:

"Petuh wiff his sword in han'
Cut off de ear ob de sojer man,
But de Lawd he put it back agen
An' go away wiff de high pries' men.
'Petuh! Folluh yo' Lawd!'"

Jaggers glanced out at the huge black man, his head bandaged and arm in a sling, who sat on the car steps. Beside him lounged a tall Mexican smoking a cigaret. Jaggers waved a hand and Jumbo Jackson showed all his teeth in a delighted grin. Jaggers read with satisfaction what he had written:

C. & P. Employment Agency,
Chicago, Ill.

Countermand previous instructions and send that consignment of Swedish section laborers to the Tonto Division, where they are needed. We are well provided with men here at Laradeo.

Dunn.

NORTH AMERICA'S LAST BROAD-GAGE LINE

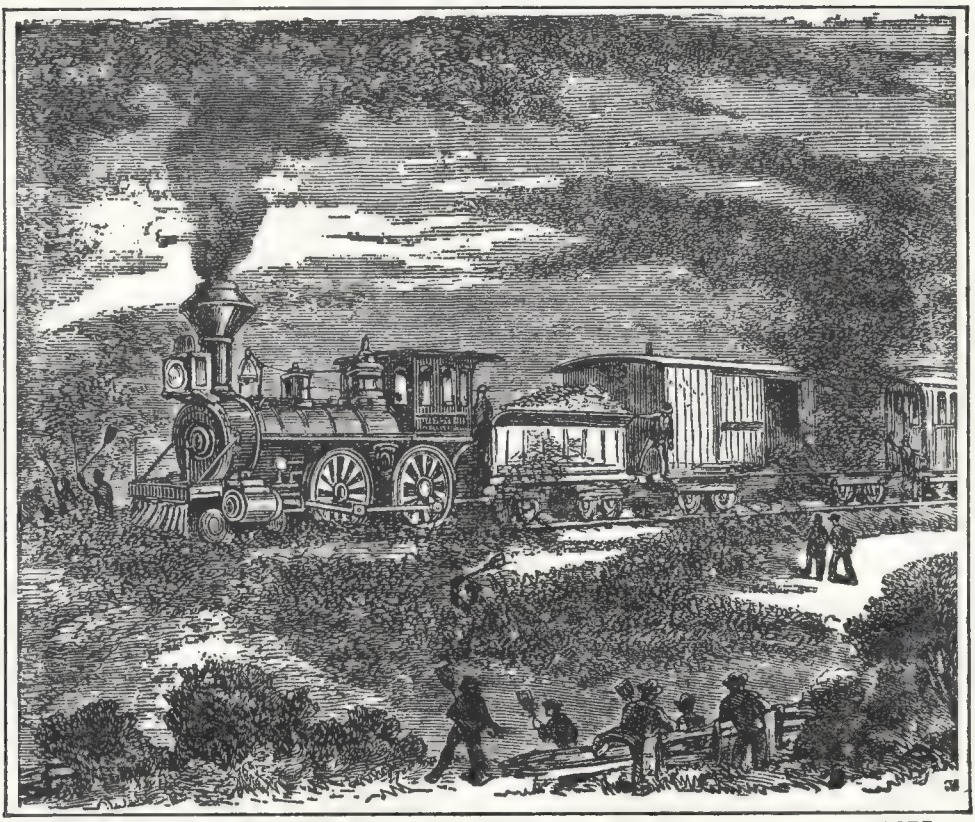
THE broad-gage railroads of North America have died out, living only in the memory of a few surviving old-timers who used to operate them. One by one the lines were standardized into 4 feet 8½ inches. In some cases this change was made gradually by adding a third rail to the track. In those days it was not uncommon, for instance, to see a 6-foot-gage engine pulling standard-gage cars, and many wrecks were caused by the double-gage system.

Several of Canada's pioneer railways originally adopted a gage of 5½ feet, but they have all been widened, the last one being the little Carillon & Grenville in Quebec. This famous road, chartered by the Candian Government, ran 13 miles between the two towns of Carillon and Grenville, along the east bank of the Ottawa River. Its charter was unique in that no time limit was set for making extensions to connect with the Grand Trunk and other roads.

Robert R. Brown, of Montreal, Canadian representative of the Railway & Locomotive Historical Society, advises us that the road was built under the 1853 charter of the Montreal & Bytown Railway. It was intended to run from Montreal to Ottawa, but the section between Carillon and Grenville was rushed to completion because of rapids in the Ottawa River. This section was finished in October, 1854. Next year Alexander Sikes, the promoter, was drowned, and work was suspended for a time.

The name was changed from the Montreal & Bytown to the Carillon & Grenville. This was in 1863, when the road was purchased by the Ottawa River Navigation Co., which operated it only in the summer time, to supplement its steamboat service above and below the rapids. The Central Railway of Canada took over the C. & G. in 1909, but got into financial difficulties, and discontinued train service on the old line in 1910. Four years later the road was bought by the Canadian Northern. After being rebuilt to standard gage, trains began running again in 1919.

According to Henry Cotterell, Jr., its three engines were the "Grenville," No. 1, 4-4-0 type with 60-inch drivers, built by Kinmond Works in 1854, scrapped in 1914; the "Carillon," No 2, 4-4-0 type with 60-inch drivers, built by the Kinmond in 1854 and scrapped in 1895; "Ottawa," No. 3, 4-4-0 type with 60-inch drivers, built by the Canadian Works in 1856 for the Grand Trunk and sold to the C. & G. in 1870, scrapped in 1916, when the road closed up. J. B. McKinnon, Capreol, Ont., says they were all inside-connected and burned peat, and that about twenty years ago he saw one of them in storage in the abandoned shops at Grenville.



Union Pacific Train Stopped by Swarms of Grasshoppers Near Plattsmouth, Neb., in 1875

Stranger Than Fiction

By E. J. BURNS

WITH bare hands toughened by years of firing freight locomotives, Graham McLeod captured a big male timber wolf last winter near Milepost 115 on the right-of-way of the Algoma Central & Hudson Bay Railway. This road extends northward through the bleak wilds of Ontario, Canada, 295 miles from Sault Ste. Marie to Hearst.

McLeod, peering out his cab window, saw the brute trotting along in front of the engine. On one side of the track towered an 800-foot cliff and on the other ran the tumultuous Agawa River, so the wolf was trapped by the oncoming locomotive. McLeod crawled out onto the pilot. As soon as the engine caught up with the beast he grabbed the tail and dragged the animal back to the tank box, suffering no injury except gashed fingers.

"This is the second wolf I have caught that way," he declares, "to say nothing of three foxes."

A red hot stove was stolen from the crossing watchman's shanty at Mineola, on the Long Island Railroad, one cold winter evening. How the stove, full of blazing coal, was taken away and who has it now are still unsolved mysteries of the roaring road.

But there is no longer a mystery in the theft of the little frame station at Adams, Mich., on the Goshen branch of the Michigan Central, four miles south of Battle Creek. This depot vanished recently, and Captain R. R. Dwyer, a railroad bull, followed a trail that led eventually to the farm of Bill Koenig, Jr. There stood the wooden structure.

"Sure, I took it," Koenig admitted. "I needed the thing for a milk station."

"Fifty-five dollars or sixty-five days in jail," said Justice Paul Schafer.

Koenig paid the fine. His two accomplices, Al Sisler and M. Cunningham, were let off with $15 apiece.

* * *

A man named Andrew Marshall once moved the New York Central's station at Mott Haven, N. Y., which was 185 feet long, for a short distance, when the necessity arose for changing its location.

Mr. Marshall is head of B. C. Miller & Son, New York City, movers extraordinary, established 1868. He is said to be the world's champion mover. On April 14, 1888, he relocated the famous Brighton Beach Hotel at Brighton Beach, Long Island. This hotel, four stories high, 460 feet long and 210 feet wide, was owned by the Long Island Railroad. Its foundation was being undermined by the advancing shore line, but expert engineers insisted it couldn't be budged.

Andy Marshall knew better. He jacked up the whole building six feet and laid twenty-four parallel railroad tracks under it, slid 120 flat cars under-

Odd Wreck on the Chicago & North Western at Geneva, Ill., July 11, 1933. Thirty Cars of Wheat, Rye, Meat, Potatoes and Other Foodstuffs Were Scattered Over the Countryside, but Nobody Was Hurt

neath, and let the hotel down on the cars. The rest was easy. Six L. I. R. R locomotives were fastened to the flat cars by two miles of rope, and, in the presence of thousands of spectators, the hotel was highballed to its new location, 595 feet away. Mrs. Marshall, proud of what Andy was doing, sat in a rocking chair on the hotel porch during the entire operation, just to show confidence in her husband.

* * *

There isn't much an iron horse can't do these days. A Norfolk & Western locomotive at Roanoke, Va., supplied power for a steam laundry. Old No. 12 on the LaCrosse & Southwestern helped to put out the fire in a burning farmhouse near Stoddard, Wis. Then, at Beaver Dam, same State, Milwaukee engine No. 2765 ran the Kraft-Phenix cheese plant in an emergency. Recently a Baltimore & Ohio locomotive was used in the manufacture of beer for the Hazelwood Beverage Company, Pittsburgh, Pa. This iron horse worked several weeks continuously, twenty-four hours a day.

* * *

Superstitious sailors are afraid that bad luck will come from shooting an albatross, and, by the same token, railroad men refuse to annoy a robin redbreast. Take the case of J. F. Pringle, general superintendent of transportation, Canadian National Railways. Last June Mr. Pringle received this message from the station agent at Peterboro, Ont.:

Car No. 403,102 has robin's nest on rods. Please arrange for supply of worms at terminal. The mother is in charge.

Mr. Pringle reached for the telephone. By the time that train arrived at its destination an ample supply of worms for the bird family was waiting in custody of the yardmaster.

A similar case occurred in the busy freight yard of the Milwaukee Road at Tacoma, Wash. A robin had built her nest under a sill step of an air-dump car. C. A. Norwood, a yard clerk, found the nest and announced his discovery to the office force. Whereupon Superintendent F. E. Devlin issued the following order:

Under no circumstances is that car to be moved. Air dump No. X905,055 must stay. If possible, don't even move the other cars on the same track. But first and last, keep that car stationary until the eggs are not only hatched but until the robins fly.

On the Pere Marquette, a train of empty freight cars was rumbling out of the yards at Benton Harbor, Mich. Back in No. A616, Conductor Roy Blodgett called over to his rear brakeman, Charlie Webster:

"A bird is chasing us."

When the train stopped, the trainmen discovered that a mother robin had built her nest on the under side of the crummy. In it were three blue eggs. Ward Salsbury, head brakeman, saw the men peering under the caboose and he yelled:

"Whatsa matter; got a hot box down there?"

"No," the conductor shouted back. "A robin's nest. Go easy, will you?"

So Engineer Charlie Wilcox did his darnedest to make the starts and stops as joltless as possible all the way to Hartford, Mich. The fireman was Howard Peck. On the return trip to Benton Harbor, the caboose was placed exactly in the same spot on the storage track from which it had been taken, in the hope that Mrs. Redbreast would go back to her eggs. Sure enough, she did!

Maybe Some Section Hand Could Tell Us What Kind of Power Is Used to Operate This Funny-Looking Car in South Africa. The Passengers Are F. Trubee Davison, President of the American Museum of Natural History; His Wife; and a Native Escort

The story spread, arousing sympathetic interest. C. A. Wilkins, general agent and former train dispatcher, decided that something should be done about it. He telegraphed J. G. Grigware, superintendent of the Chicago-Petoskey Division at Grand Rapids, explaining the situation. Back came the order:

Use extra caboose until robin is done with car.

Mr. Grigware sent an extra crummy to Benton Harbor. The super was not only a rail with a heart, but he also showed keen business sense in issuing an order that was bound to create public goodwill.

* * *

One of the oddest railroad depots in the world is located in Galicia, Poland, under the town of Wieliczka (pronounced Vya-litch-ka). It is the central

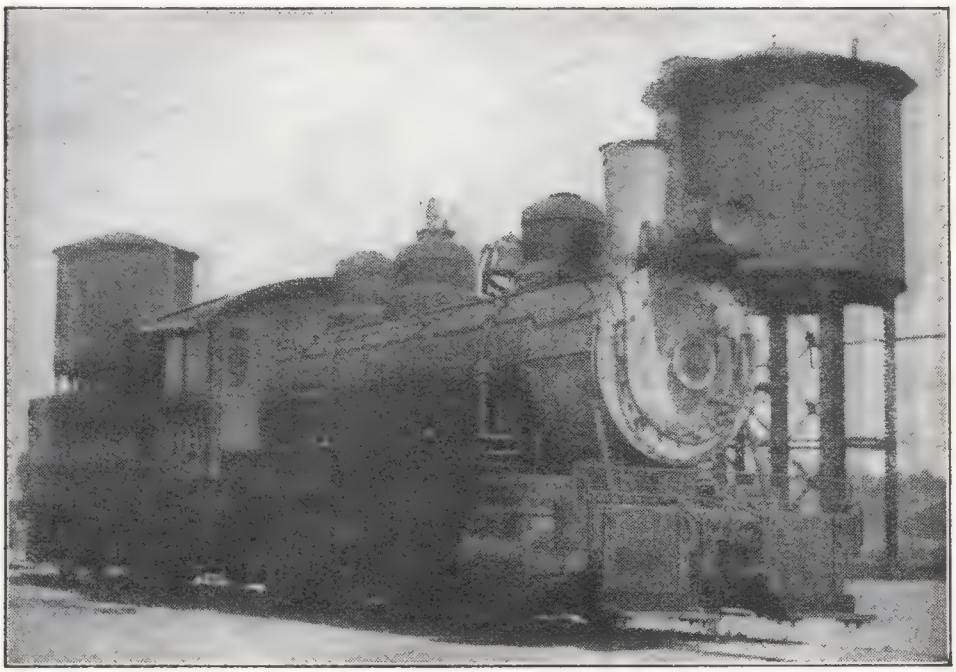


Photo by R. Wilkins Demoro, 1986 20th Ave., San Francisco

This Old Boomer Hog Takes the Prize for Frequent Renumbering. Here Is Her Record: (1) New Mexico Ry. & Coal Co., No. 101; (2) Alamogordo & Sacramento Mt., 101; (3) El Paso & N.E., 101; (4) E.P. & S.W., 101; (5) E.P. & S.W., 420; (6) E.P. & S.W., 4; (7) Now No. 1300, Southern Pacific, Coast Division. 0-8-0 Type, Originally 2-8-0; 21x24 Cylinders! 46-Inch Wheels; Total Weight, 134,800 Pounds. Built by Baldwin in 1898. Photo Made at Watsonville Jct., Calif., June, 1932

station in what is said to be the world's largest salt mine, and is made entirely of salt! This mine has a large network of rail lines, with several hundred horses as motive power. Once these horses enter the mine they never again see the light of day. Even their stables and stalls are hewn out of the glistening white salt, and it is not uncommon for the animals to go blind from the whiteness. The central station has large platforms and spacious refreshment rooms like other railroad depots, but all are made of sodium chloride.

* * *

There are many railroad stations with long names in Poland, but the prize goes to a branch line in southern India, on which a station is called Adikalapuramcum-Veerapandiyanpatnam. This is a composite of the names of two villages. Each is equally distant from the depot and each equally insistent upon the use of its name. So the compromise was reached, to the disgust of train callers and passenger brakemen.

* * *

The important stations in India's hottest sections used to keep a supply of coffins on hand for the benefit of passengers who died from the heat.

* * *

In South America, the Central Railway of Peru—known as "the Railroad in the Sky"—winds its way across the Andes to a height of three miles above sea level! The atmosphere up there is so thin that each passenger train carries an oxygen tank as "first aid" to passengers who are subject to heart trouble.

Building that road is said to have been the world's toughest construction job. Started in 1871, it was completed twenty years later. The first 138 miles, with 132 tunnels and bridges, caused the death of four workers out of every five!

* * *

Here's a funny one: A westbound train on the Milwaukee Road leaving Lombard, Mont., runs almost due *south* along the west bank of a stream, while a westbound Northern Pacific train pulling out of Lombard travels directly *north* on the eastern bank of the same stream. Why do two westbound trains travel in opposite directions and eventually reach the same destination, which is Butte? The answer is, tracks of the rival railroads curve around mountains.

* * *

When a Frisco train was marooned by flood for twenty hours in the "Arkansaw" mountains not long ago, the passengers and crew became painfully conscious of a craving for nourishment. Finally the Railway Express messenger, Kenneth Williams, hit upon the brilliant idea of milking a cow that was being carried as baggage. And this was done.

Another Railway Express messenger, S. G. Owen, has the distinction of having slept in a different State each night for seven successive years, 1906 to 1913, yet during all that time he slept in only three States—Alabama, Tennessee and Mississippi! This peculiarity is explained by the fact that Mr. Owen worked seven days a week, covering an express run on the Frisco. He spent one night in Birmingham, Ala., the next in Memphis, Tenn., and the third in Aberdeen, Miss. Then Memphis and Birmingham again, making the same round trip over and over for seven years.

C. A. Wilcox, Illinois Central station agent at Columbia, Miss., boasts of having a nineteen-year-old cat that has given birth to 197 kittens. Wilcox has been boarding this animal at the depot for seventeen years at a cost estimated to be $300. Just how many mice have been killed by pussy and her progeny is a problem for the auditing department.

Another famous railroad cat is "Betty," of the Delaware, Lackawanna & Western. Betty is on the payroll as official mouser in the terminal at Hoboken, N. J.

According to Henry Byrnes, general station master, Betty was all set to spend the rest of her life as a home guard. But one day kitty developed a wanderlust. She boarded the "Lackawanna Limited" at 10.20 A.M., riding Pullman, only she was curled up *underneath* the car instead of in it. A baggage man spied the cat as the train was passing through Morristown, N. J., and wired Frank Batson, lightning slinger at Dover, N. J., to stop the train on account of the cat.

The crack flyer ground to a stop, 39 miles from Hoboken. The conductor came running back to see what was the matter. Betty was sent back to her family of two kittens in the Hoboken Terminal.

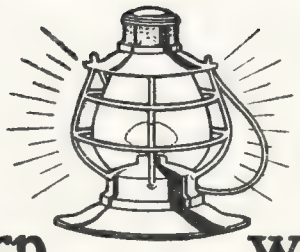
* * *

Thinking of cats, one is reminded of Australia, where countless hordes of mice, fiercely hungry, invaded the Nullabor plains along the Trans-Australian Railway. Thousands entered the Lagoona depot while the station master was away, gnawing at everything edible, including a roll of banknotes. Incidentally, the "Trans - Australian Limited," on this line, is said to be the only train in the world which carries a piano as part of its regular equipment

From Railroad Photographs, 5 Appian Way, Allston, Mass.

Baldwin-Built Mikado Type No. 7 of the Laramie, North Park & Western Steaming into Laramie, Wyoming, with a Two-Car Train

By the Light of the Lantern



Ask us what you want to know

RAILROAD questions are answered here without charge, but these rules must be observed:

(1) Not more than two questions at a time. No queries about employment.

(2) Owing to the number of queries, no engine specifications are printed except type, driver and cylinder dimensions, weight, and tractive force (t.f.).

(3) Sign your full name and address as evidence of good faith. We will print only initials, without street address.

(4) Always enclose a self-addressed stamped envelope, to facilitate our getting in touch with you if necessary.

(5) Answers to questions are published in this department. Don't be disappointed if they do not appear at once. This department is printed two months in advance of date of issue.

WHAT is the use of the small pipes under the running boards of most locomotives? (2) Was a feed water heater ever used on locomotives by running it through pipes situated in the boiler fire tubes?—F. D., Lynbrook, N. Y.

(1) Although your question is a little vague, we assume you are referring to the cooling coils which are part of the air compressor discharge pipe. The reason for these extra lengths of pipe is that compressed air is both warm and wet when it is discharged from the compressor or "pumps," and hence ought to be passed through 35 or 40 feet of pipe in order that it may be cooled to atmospheric temperature. In the cooling process the moisture produced in compression is condensed to water, which then collects in the main reservoir. Most modern locomotives are abundantly equipped with such cooling pipes, but because of space limitations they are generally bent back on themselves, so that in many cases there are four or five layers of the same pipe hung under a running board.

(2) At first glance the feed water heater suggested in your question would seem to be ridiculous, for the fundamental principle of the feed water heater is to use exhaust steam or gases (which otherwise would pass into the atmosphere) to heat water from the tender before it goes into the boiler, whereas the heater you mention would function by using hot gases which heat the water in the boiler. Obviously there would be no advantage in pre-heating water by taking away heat from the boiler into which the pre-heated water must go. However, the Superheater Co. informs us that in 1903 an Englishman named Haythorn invented some such device, and that it was actually tried out on the London & South Western. How it worked or how long it was used we do not know. Suffice to say that no arrangement as you describe is in use today.

DO call boys work in eight-hour shifts? (2) Are crews of scheduled freights usually called? Are they required to sign for the calls, or can the call boy use a phone?—E. H., Brooklyn.

(1) Yes.

(2) On most roads "scheduled" freight trains run at almost any time, depending on when the train is ready, etc. Thus their crews are called for whatever time they are ordered. The call boy may use the phone, but if it is impossible to get his man on a wire, he must call in person and secure a signature.

WHY don't engines have journal boxes on pilot or leading truck wheels? They have them in back.—J. W. J., Lake Placid, N. Y.

To the contrary, all locomotives have journal boxes on their front wheels. Some are inside, and others outside, as on most rear trucks. Perhaps you have not seen any leading trucks with outside journals, but they are coming into wide use, for they are proving to be quite successful. They are used on the Canadian National, Erie, Great Northern, C&NW, to mention a few. A broad statement could be made to the effect that they are installed on engines with the greatest weights on their leading trucks, but a careful study of the facts will show that inside journal trucks, both four-wheel and two-wheel, are satisfactorily employed to carry just as much weight.

IN a recent newspaper article I read of a grade crossing wreck in which a train hit a truck and carried it a quarter of a mile down the track

before stopping. The reason given was that the collision broke the air line between the locomotive and tender, rendering the air brakes inoperative. How could this happen?—E. C. H., Lewiston, Me.

Although we could use a few more details, such as whether or not the automatic air was connected (perhaps the engine a switcher hauling a drag of cars with only its independent air), we can safely say that such an occurrence would be impossible. If the train line had been connected up and had been in working order the brakes on all the cars, as well as those on the engine and tender, would have gone into emergency application as soon as the train line broke. Even if the train line had not been connected, a break in the automatic line between the engine and tender would speedily set the brakes on them. In the last resort, if only the air line to the tender brake cylinder had broken (on ET equipment), the engine and tender brakes could not set. But this is exceedingly improbable. Evidently the reporter who wrote the article was not familiar with air brakes, and consequently made the usual mistake of assuming that when the air line breaks the train is no longer under control.

A. M., Stittsville, Ont.—The St. Louis, Vandalia & Terre Haute, generally called the Vandalia Line, was chartered in 1865, opened in 1870. When finally completed it ran from East St. Louis, Ill., to the state line, 158 miles. It became a part of the Pennsylvania System. In 1899 it had 53 locomotives, 21 passenger and 2,307 freight cars.

WHAT rolling stock, engines, etc., did the Colorado Midland have in 1900 and what does it have now?

(2) Would it be possible to run a medium size freight up Ute Pass and do it profitably?—A. S., White Plains, N. Y.

(1) In 1900 the CM had 55 locomotives, 26 passenger and 1,476 freight cars, and 60 and 65-lb. rail. It was abandoned in 1918.

(2) The Midland Terminal Railway is at present running trains over the old CM right-of-way between Colorado Springs and Cripple Creek. This is the only portion of old CM trackage still left. The MT no doubt runs plenty of "medium size" trains up Ute Pass, but whether or not it is making a great deal of profit by doing so we cannot say. But since it is still running it cannot be losing too much.

WHEN was the first three-cylinder locomotive built and for what road? Is it still in service?—M. S., Scranton, Pa.

The first three-cylinder locomotives in the United States were the "George Washington" and "Ohio," which were built about 1845 by the Norris Brothers for the Philadelphia, Wilmington & Baltimore (now PRR). They were rebuilt in 1847 and 1848. Naturally they are no longer in service. In 1880 three small engines of this type were constructed by the Pennsylvania Coal Co., and in 1892 a larger one was made for the Erie & Wyoming Valley RR. Then none of this type was built till 1912, when one was made for the Philadelphia & Reading. About ten years later they began to be constructed for many roads, and now are fairly common.

WHAT is the difference between a railway and a railroad?

(2) What is the mileage and equipment of the Chicago & Eastern Illinois?—R. Y., Oak Park, Ill.

(1) There is no difference between a railway and a railroad. Either term is correct. Some roads use the former and others the latter. The term "railway" is perhaps the earliest, for it was and is used in England, whereas the word "railroad" was developed in America. In the early days it was never used as one word: "rail" and "road" were kept separate, and this accounts for the abbreviation "R. R." Again, many lines have used both: when a reorganization was necessary and the name of the road had to be changed, they simply kept the original name but changed the "railroad" to "railway," or vice versa.

(2) The Chicago & Eastern Illinois is 939 miles long, has about 285 locomotives, 242 passenger, 6,809 freight and 410 miscellaneous cars. Its roster of motive power was printed in our June, 1933, issue.

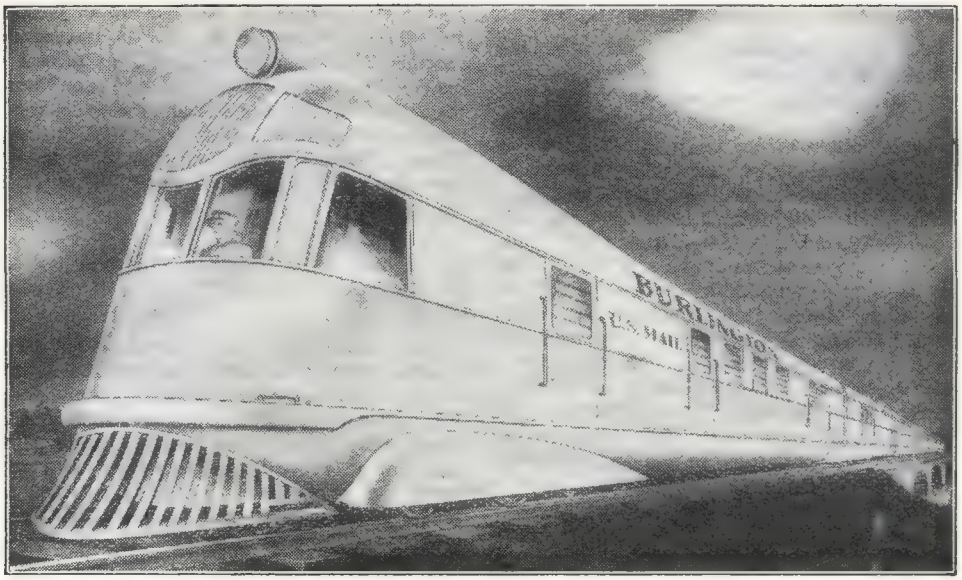
C. H., Roselle, N. J.—Lehigh Valley Class N3, Nos. 395-424, 2-8-2 type, has 27x30 cylinders, 63-inch drivers, 190 lbs. pressure, weighs 325,000 lbs. without tender, exerts 56,063 lbs. t. f.

CRRofNJ Class M3s, Nos. 896-915, 2-8-2 type, has 27x32 cylinders, 200 lbs. pressure, 63-inch drivers, weighs 551,000 lbs. with tender, exerts 62,950 t. f.

Reading Class M1sa, Nos. 1700-1756, 2-8-2 type, has 25x32 cylinders, 61½-inch drivers, 220 lbs. pressure, weighs 334,427 lbs. without tender, exerts 60,800 t. f.

S. B., Mt. Vernon, N. Y.—The Lehigh and Hudson River Ry. was incorporated in 1882. In 1907 it absorbed the Orange County RR.; in 1912 merged with the South Easton & Phillipsburg RR. and the Mine Hill RR. At present it operates on 96 miles of tracks, 75 of which it owns. It uses the PRR tracks from Belvidere to Phillipsburg, N. J., and the NYO&W tracks from Campbell Hall to Burnside, N. Y. The PRR, in turn, runs on its line on the way to the Poughkeepsie Bridge over the Hudson River.

(2) The Fox Film Corp. used the equipment of the Southern Pacific and its station at Piru,



This Is the Way the New Burlington Two-Mile-a-Minute Streamlined Stainless Steel Train Will Look When It Is Finished. Like the U. P. Train Described in Our September Issue, It Will be Composed of Three Sections on Four Trucks, and Will Be about 196 Feet Long. Electricity Generated by a Diesel Engine Will Furnish Its Power

Calif., in making the moving picture "Smoke Lightning."

J. J. S., Cedar Rapids, Ia.—Missouri Pacific No. 5337, 4-8-2 type, has 27x30 cylinders, 73-inch drivers, 250 lbs. pressure, weighs 394,000 lbs. without tender, exerts 63,665 lbs. t. f. Specifications of Southern Ry. No. 6480 were given at the bottom of page 84 of our July, 1933, issue.

G. E. V.—Specifications of NYC Nos. 577, 595, 654, appeared on page 90 of the August, 1933, issue. Class F12, Nos. 2066-2166, 4-6-0 type, exerts 31,000 lbs. t. f.

WHEN was the Fargo & Southwestern branch of the NP built through Verona, N. D., and when was it finished? What types of motive power have been and are being used?—W. A., Verona, N. D.

Construction of this branch from Fargo to La Moure started May 12, 1881, and the line was completed August 1, 1883. Operation to Lisbon started July 1, 1883 and to La Moure the following August 5. The track was laid to Verona on July 6, 1883. The first locomotives used were 4-4-0 type, Classes B and C. At present Class Q1, 4-6-2 type, and Class T, 2-6-2 type, are operated.

WHICH states do not allow its roads to burn anything but coal?—T. C., Jacksonville, Fla.

So far as we know this is not true of any state, nor is there a remote possibility that it will be true of any. Why a local government would force its railroads to burn nothing but coal is a mystery to us.

Space does not permit us to print information about a list of roads as long as the one you sent us. If we did so we would have room for no one else's questions. We suggest you purchase a copy of the "Pocket List of Railroad Officials," published by The Railway Equipment and Publication Co., 124 W. 33d St., New York City. It contains much valuable information along the lines you ask about.

W. J. S., Galesburg, Mich.—The Quanah, Acme & Pacific was incorporated in 1909 to succeed the Acme, Red River & Northern. It is now controlled by the Frisco, although it retains its identity. It runs between Red River and Floydada, Tex., 119 miles, with a branch from Matador Jct. to Matador. At present it has 8 locomotives, 43 freight and 3 passenger cars, and uses 52-75-lb. rail. Originally it was projected to El Paso, Tex., across the southeastern corner of New Mexico, but thus far it has been built only to Floydada.

A FRIEND of mine has told me that railroads are in a bad fix because they are capitalized too highly, that is, they have more stocks and bonds outstanding than the roads' actual value

would warrant. Is this true?—A. L., Denver.

Your friend has made a pretty poor diagnosis. The fact of the matter is that although what he says may have been true fifty years ago, it has become less true each year, until in 1930 the total net capitalization of our railroads, while actually increasing, has decreased greatly in proportion to the total rail investment. In 1911 our Class 1 railroads were worth about $15,000,000,000, that is, the rolling stock, buildings, equipment, rights-of-way, etc., were valued at that amount. In that year total net capitalization of *all* roads, both Class 1 and smaller lines (except switching and terminal companies) was only a few million dollars more than $15,000,000,000. (By net capitalization is meant the total amount of railroad securities, stocks and funded debts in the hands of the public.) In 1920 the property investment of Class 1 roads had risen to almost 21 billion, whereas total net capitalization of all railroads was about 17 billion. In 1925 the figures were 23½ billion investment, and less than 18¼ billion net capitalization; in 1931 they were 26¼ billion investment and about 19 billion net capitalization. Note how net capitalization has been decreasing in proportion to value. If these figures have any bearing on the question, your friend's solution of the railroad problem hardly seems based on facts. Whether or not the railroads have a too high valuation is another thing, but our guess is that their investment figures are not padded to any extent.

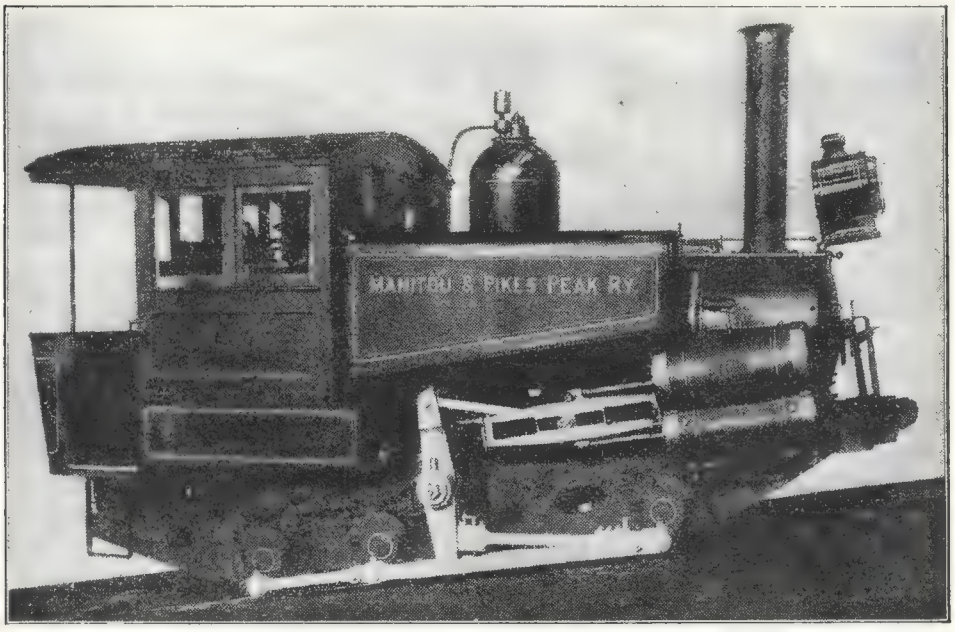
C. H.—The Laramie, North Park & Western was incorporated in 1924 to succeed the Laramie, Hahn's Peak & Pacific. At present it has five locomotives, 2 gas cars, and uses 60 and 70-lb. rail. A year ago it had 91 employees. It ran up an operating deficit of $62,248 in 1931. We are able to get no information about its motive power, but we are printing a photo of its No. 7, 2-8-2 type.

IS it true that English locomotives do not use either bell or headlight?—S. L. R., Shillington, Pa.

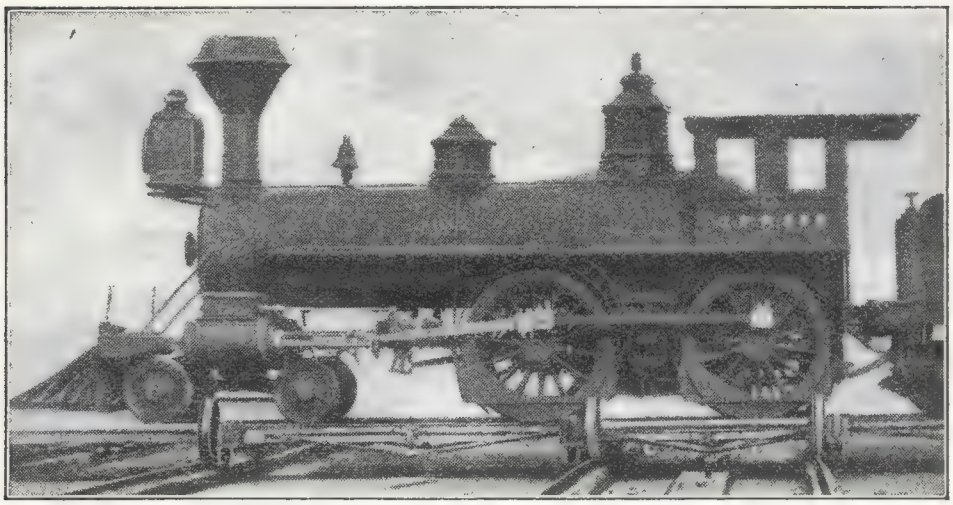
Yes. The English have learned to get along without either bell or headlights, and the absence of these devices does not seem to inconvenience them in the least. Of course, you must remember that English rights-of-way are fenced in and that there are no exposed grade crossings. In continental Europe, however, headlights do exist, although none of them seem to be as large or as powerful as those in America.

H. H. P.—We are unable to get data on Savannah & Statesboro motive power.

V. G.—Although on page 121 of our August, 1933, issue we stated that the Bellevue-Cascade (Iowa) narrow-gage branch of the Milwaukee Road is abandoned, later events have indicated that this 3-foot gage line may continue to



Rack Locomotive of the Manitou & Pike's Peak Ry. Gears on the Driving Axles Engage with the Rack, Which Is Situated between the Rails. Its Boiler Is Inclined to Keep the Water Level When It Ascends the Steep Grades of Pike's Peak



From Collection of Joseph Lavelle, 4615 66th St., Winfield, L. I., N. Y.

A Beautiful Example of the 4-4-0 or American Type—Old-Time Canadian Pacific Diamond-Stack Engine No. 285

run. Recently the Interstate Commerce Commission authorized a newly organized company known as the Bellevue & Cascade to acquire at salvage value and operate this 36-mile road. Reports say that the motive power will largely be composed of gasoline-driven rail cars.

E. W. H., Bridgeport, Conn.—In the summer of 1931 the General Electric Co. delivered to the New Haven 10 high-speed passenger electric locomotives, Nos. 0351-0360. These have 56-inch drivers, weigh 403,500 lbs., are 77 feet long, can pull 15 Pullmans at 70 m.p.h., and exert 68,500 lbs. starting t. f. They did not replace any other locomotives; they merely added to the equipment in service.

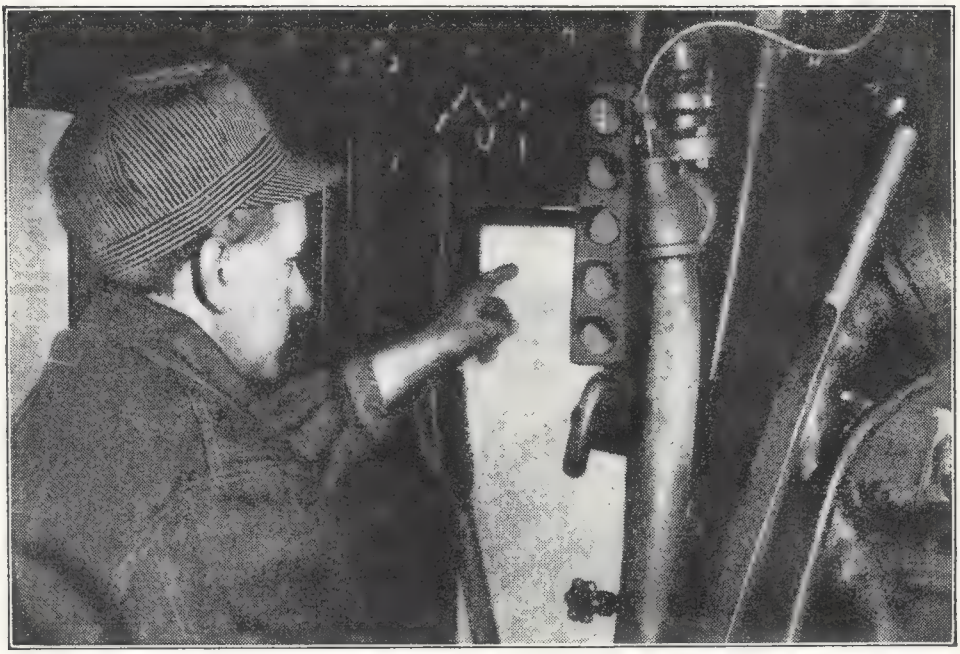
HOW can I get in touch with operating officials of the St. Louis-Kansas City Short Line? —E. D. P., Morton, Ill.

Early this year the St. Louis-Kansas City Short Line was formed to construct a high speed electric railroad between St. Louis and Kansas City, Mo. Reports said that it would be 236 miles long and would be double-tracked all the way. Thus it would be 50 miles shorter than any of the existing routes between the two cities. Some time ago the company applied to the Reconstruction Finance Corp. for a loan of $35,000,000 to finance construction, but the Interstate Commerce Commission did not approve the loan on the ground that the company was not a carrier and did not even have a certificate for construction. Then the company applied to the I. C. C. for a certificate authorizing construction. Up to the date of our going to press we have not learned whether or not it has been granted. It seems unlikely that much will come of this project, for already the Rock Island, MoP, Wabash and the Burlington maintain lines between St. Louis and Kansas City. So far as we know no operating officers have been appointed.

W. A. R., South Boston, Mass.—It is difficult to say at what date the CB&Q "entered Nebraska." The records show that in 1869 a company affiliated with the CB&Q was organized to build a bridge over the Missouri River at Plattsmouth and extend the road to Kearney, Neb., which apparently was done shortly afterwards. This company built and bought many branches in Nebraska but was not officially consolidated with the CB&Q until 1880 (which also was the year in which the CB&Q acquired the Hannibal & St. Joseph, the line from Kansas City to Omaha and from Burlington, Ia., to St. Louis, Mo.). Therefore it can be said that the Burlington did not enter Nebraska until 1880, but the fact remains that it was probably responsible for construction in that state as early as 1870.

HAS the Baltimore & Ohio a 4-4-6-2 type in service? Where is it used?—W. R. O.

In 1930 the Baldwin Locomotive Works constructed for the B&O two locomotives of the 2-6-6-2 type: Nos. 7400 and 7450. Both had 23x30 cylinders (4), 250 lbs. pressure, 70-inch drivers and exerted 90,000 lbs. t. f. They were very much the same except that No. 7400 was equipped with an Emerson water tube firebox. Photos appeared in our November, 1931, issue. In October, 1932, however, the B&O rebuilt No. 7400 into a 4-4-6-2 type with the following specifications: 23½x30 and 20½x30 cylinders, 70-inch



Remarkable Photo Showing Cab Signals Operating in Cab of Pennsylvania Locomotive. Electrician W. A. Fry Is Pointing to the Top Signal, Which Shows "Clear." See Answer below for Details

drivers, 250 lbs. pressure, 83,200 lbs. t. f. It is now used in handling heavy passenger trains over the Allegheny Mountains. No. 7450 is still operating in fast freight service on the B&O's western lines.

COULD you give me the name of a wood-burning narrow-gage railroad which, I am told, runs about 20 miles from Reading, Pa.?

(2) Does the Jersey Central still use its 400 series, 4-8-0 camelback types?—W. D. S.

(1) We are at a loss to know what railroad you refer to, for none of our sources mentions any such line. Perhaps your informer is thinking of the Brownstone & Middletown, which was discussed on page 44 of our October, 1933, issue. (2) CRRofNJ Nos. 430-480, 4-8-0 type, are still in service. They have 20x32 cylinders, 200 lbs. pressure, weigh 224,000 lbs. without tender.

X. X.—New York Central Class H5, Nos. 3800-3984, 2-8-2 type, has 25x32 cylinders, 63-inch drivers, 180 lbs. pressure, weighs 289,300 lbs. without tender, exerts 48,570 lbs. t. f.—58,470 with booster. Class K3, Nos. 3267-3437, 4-6-2 type, when built had 24x26 cylinders, 79-inch drivers, 200 lbs. pressure, exerted 32,200 lbs. t. f. Those now equipped with booster, 41,900 lbs.

(2) Practically all the roads you list use 2-8-2, 4-8-2, 2-10-2 types in freight service, and 4-6-2, 4-6-4, 4-8-2 types in passenger service. Space doesn't permit us to list them separately. We suggest you follow our monthly articles of locomotives of various roads. Several of the lines you list have already been taken up.

R. K. T.—According to J. B. Carter, California State Blind School, 3001 Derby St., Berkeley, Calif., the Stone Canyon Ry. used to connect with the SP at Nacimiento, Calif, and it was suspended in 1912, after its bridge over the Salinas River was washed out. According to L. S. Slevin, Carmel, Calif., the junction point with the SP is now called McKay, and the Stone Canyon ran from it to Stone Canyon station, about 20 miles up in the mountains. Mr. Slevin verifies the statement about floods, and adds that in 1919 he found the track suspended in the air for long distances. Among some engines and cars at McKay was an old NYC&H No. 102, built by Schenectady in 1890.

HOW do the cab signals on the Pennsy and Long Island work? Do they use induction or a photo-electric cell?—V. W. F., Brooklyn, N. Y.

Both roads employ what is known as a coded continuous cab signal system, which, briefly, reproduces in a cab signal the indications of the signals along the right-of-way. The Pennsy uses

four-indication cab signals: "clear" (top disc), "approach-restricting" (second and third discs), "approach" (fourth disc), and "caution—slow speed" (bottom disc). The Long Island uses three: "green" (top), "yellow" (center) and "red" (bottom). The equipment for such signaling is divided into two parts: that along the right-of-way and that on the engine. To describe each in detail would take more space than we can use here, but suffice to say that a 100-cycle track circuit current is artificially interrupted at a certain rate called the code frequency, and that this varies with the condition of the track ahead. Thus, when the receiver (a laminated iron bar mounted ahead of the leading wheels on a forward-running locomotive and behind the rear tender wheels on a backward-running engine) contacts the rail, it passes on any change in code frequency to the equipment box, which is usually mounted on the pilot. Voltage induced in its receiver coils is delivered to the amplifier, which in turn gives it to the electrical apparatus on the engine. As you can see, photo-electric cells are not used; obviously the signals work by induction. In addition to the light signals in the cab, any unfavorable signal indication causes a loud warning whistle in the cab to blow. The engineer acknowledges this by throwing over a switch which silences it. In this way the coded continuous cab signal system is well-nigh infallible. For more details we suggest you write to the Union Switch and Signal Co., Swissvale, Pa., for its bulletin No. 144, which takes up this system in great detail.

HOW do boosters and mechanical stokers work?—V. L. E., Chicago.

We have printed several discussions about the locomotive booster in this department. The last one appeared on page 88 of our June, 1933, issue. We think it will answer this part of your question satisfactorily.

A mechanical stoker is a device for supplying fuel to the firebox of a locomotive. In general, there are two classes: those which feed fuel from above the grates, and those which supply it from below. The latter are little used, but there are many varieties of the former, and this type will be described. It consists of a conveyor for carrying the coal from the tender to the stoker hopper (located under floor of tender), an elevator-conveyor for raising it to the fire door, a system for distributing it over the grates, and a device to regulate the quantity and location in which it is placed. A small steam engine located under the cab floor provides power. The most common brands are the Simplex, Duplex, Hanna and Elvin.

The Simplex Stoker carries coal from the tender through a trough below the tender deck by means of a cast steel screw conveyor run by the stoker engine. Just ahead of the coal gate is located a crusher plate, which breaks up large lumps. The coal is pushed ahead and up into a chimney-like device whose top is inside the firebox just below the fire door. Jets of steam regulated by the fireman blow the coal from it, out on the grates, spreading it evenly. The Duplex Stoker has a conveying and crushing system similar to that of the Simplex, but when the coal reaches the under side of the engine deck it passes into a transfer hopper, where it is divided and goes into one of two elevators which raise it to distributors set in the back end of the firebox. These elevators are cylindrical affairs about four feet high which come out of the floor on each side of the fire door. The Hanna Stoker resembles the Simplex in general arrangement, but it does not use the chimney-like device in the firebox. It delivers the crushed coal directly to the sill of the fire door, from which place it is blown onto the grates by a steam blast. The Elvin Stoker, on the other hand, has a crusher under the tender floor and a screw conveyor leading directly to the elevator, which extends from the cab floor outside the firebox so that its top is flush with the sill of the fire door. No steam jet is used to scatter the coal over the grates, but mechanically operated shovels which resemble arms swing across the top of the elevator and toss the coal into the firebox.

C. A. W., Union, N. J.—The Yosemite Valley R.R. has 8 oil-burning 2-6-0 type locomotives. Specifications were given in our April, 1932, issue (P. 69).

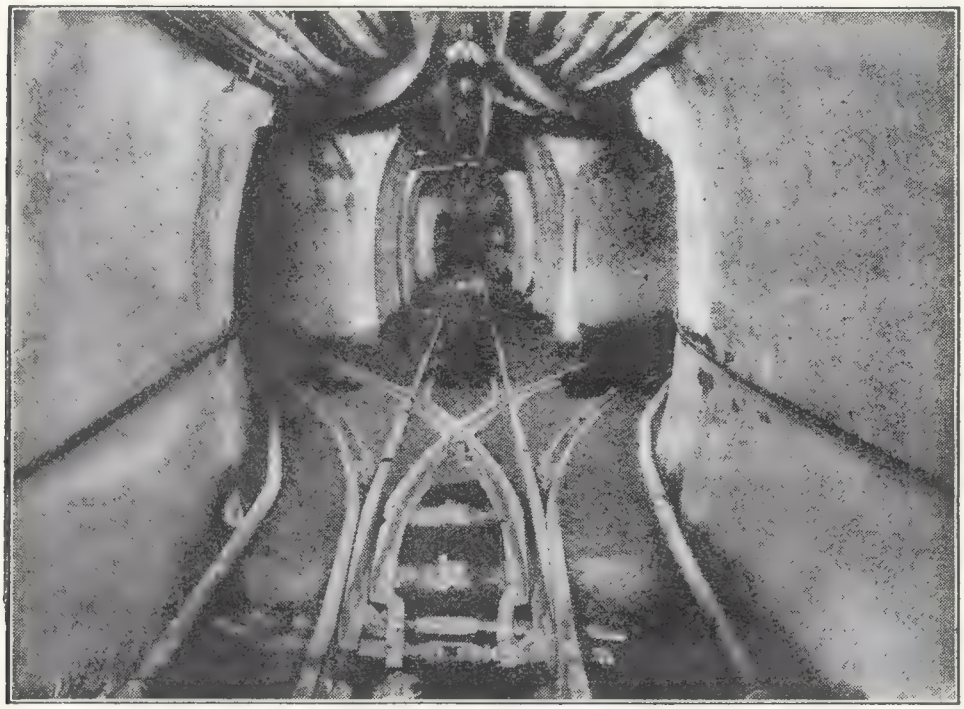
The Pacific Electric Ry. has one steam engine: No. 1504, 0-6-0 type, 19 x 26 cylinders, 175 lbs. pressure, 51-inch drivers, 27,380 lbs. t. f., weight, 140,000 lbs. It has 52 electric locomotives. These are 0-4-4-0 type, weigh 120,000 lbs., exert 30,000 lbs. t. f. when starting on clean dry rail, 21,600 lbs. t. f. at 18 m.p.h.

F. R., Newark.—A list of PRR electric engines was printed on page 91 of our August, 1933, issue.

PRR No. 2223 (no longer in service), 4-4-0 type, Class D-16sb, has 20½ x 26 cylinders, 68-inch drivers, 175 lbs. pressure, weighs 141,100 lbs. without tender, exerts 23,902 lbs. t. f. The PRR has three classes of 0-4-0 types, all of which have different specifications. Unless we know the number or class of the one you mention, we cannot supply specifications.

Under Chicago Streets

By FRANK A. HILKER
Old-Time Boomer Switchman and Trainman, Now Retired



Three-Throw Split-Point Switch on the Chicago Tunnel Railway. There Are 128 Such Intersections on This Vast Underground System

THE city of Chicago, unlike New York, has no passenger-carrying subway system. If you want to go any place in the Windy City, you have to go by elevated, street car, automobile—or walk. Still, there is something else besides dirt under the pavements of Chicago's "Loop" streets. It is one of the most unique narrow-gage railroads on the American continent. You can't ride on it, but what is more important, you can ship over it. And because you can ship goods over it, Chicago's streets are relieved of a lot of traffic.

This railroad got its start in 1901, when the Illinois Tunnel Co. began a bore under Chicago streets for telegraph and telephone wires. The venture collapsed; a new corporation was formed which was empowered to handle merchandise. It flourished, was reorganized, and gradually the present system was evolved. Now there are 62 miles of two-foot gage track which runs under practically every one of the streets in Chicago's Loop. The company operates 150 electric locomotives and has a total of 3,304 cars. It employs 580 people.

In the general offices on Jackson

Courtesy of Chicago Rapid Transit Co.

This "Dummy" Steam Engine of the Old Chicago & South Side Rapid Transit Co. Ran on the Elevated Line Between the Loop and Jackson Park from 1892 till 1898, at Which Time the Road Was Electrified

Street a trainmaster directs the movement of trains with 300 telephones. In every aspect it is a railroad organization, although the locomotives are equipped with overhead trolleys. The sidings, pocket-like, contain telephones, and the trainmaster overhead issues his orders to the crews under the city streets.

These freight tunnels are known to few—those they serve and those employed. Whisking cars of Wisconsin cheese, package freight, coal and merchandise to the big State Street stores, or unloading refuse on the barges or the disposal stations—all this goes on undisturbed. It is as though the trains were running across a Western prairie.

The cars are lifted to the surface by elevators 40 feet below the surface. Their clattering noise sounds like an express crossing a viaduct because of the subterranean reverberations. The speed seems great, and 12 miles an hour sounds as if the train were making 50.

It is no place for the big switchmen so common to Chicago yards. The tunnel is only seven feet high and six feet wide. It is of horseshoe shape, dug through blue clay, and the walls are faced with concrete a foot thick. Street signs, like those on the surface, are the only guides to location.

There are no ventilating problems. Air rushes through the elevator shafts and is carried along by the rushing trains, and from the river drifts which furnish a 55-degree temperature in all seasons. In fact, some theaters and buildings are cooled by the air drawn up by these shafts.

There is no other noise than the roar of the trains. Overhead stop lights go on, traffic officers halt motorists,

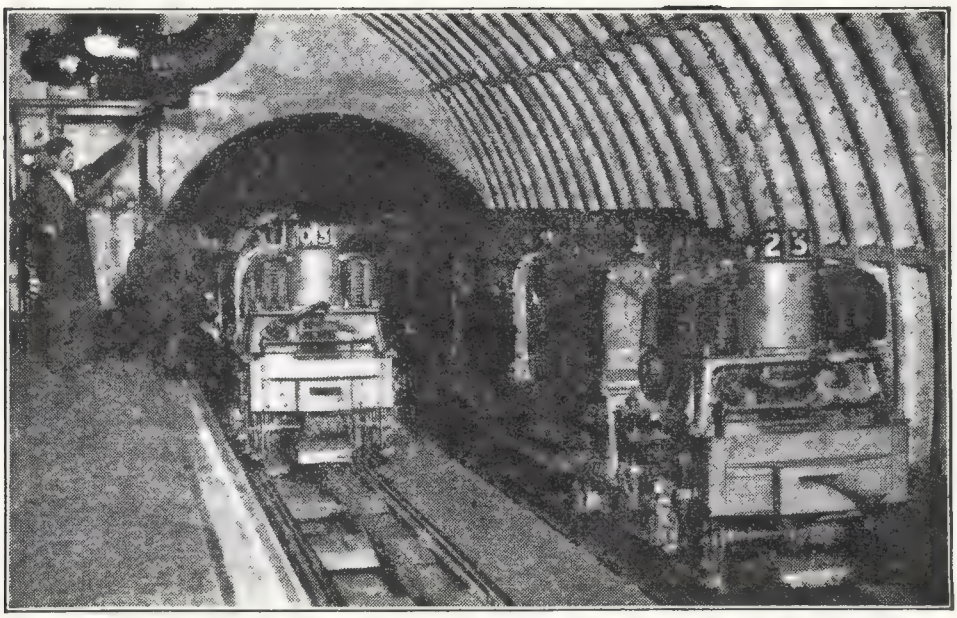
trucks, street cars. Forty feet below the surface movement is unrestricted; there is no congestion, no delay.

There is little seepage. Accumulated water is pumped to the sewers above; the bore is beneath the pipes, wires and conduits.

Twenty-eight railroads carry 2,500 cars of l.c.l. freight daily, incoming and outgoing, and a large portion of it is handled by the tunnel.

It uses automatic block signals at danger points, and glass reflectors act as warning of approaching trains from crossing lines.

Trains that pass through the tunnel daily would aggregate ten miles in length. A tunnel car carries about as much load as a motor truck. There are 300 train movements a day, equalling 5,000 truck movements on the streets overhead.



Somewhat Like the Chicago Tunnel Railway, This Post Office Line in London, England, Runs 70 Feet below Ground from Whitechapel to Paddington, Carrying 30,000 Mailbags a Day

24,000 MILES OF JUICE LINES!

THE growth of juice lines is described in a bulletin of the National Geographic Society, Washington, D. C., as follows:

"Steam locomotives received one of their first assaults from electric locomotives on the main line tracks in 1895 when the Baltimore & Ohio Railroad chose to use electric current instead of steam through the Baltimore, Maryland, tunnel; and the New York, New Haven & Hartford introduced electric locomotives in New England on its line between Nantasket Beach and Pemberton, Mass. These lines aggregating only about 22 miles of track, were insignificant compared with the thousands of miles of rails on which steam locomotives still held sway. For the next five years railroad electrification dozed. It was aroused in 1900 when the State Railways of France decided to make use of electricity by equipping some of its lines near Paris.

"Since 1902, the steam locomotive has had serious competition. Today, 31 countries have electrified about 24,000 miles of track. If all these tracks were concentrated in the United States they would form eight separate railways across the continent from Atlantic to Pacific.

4 R

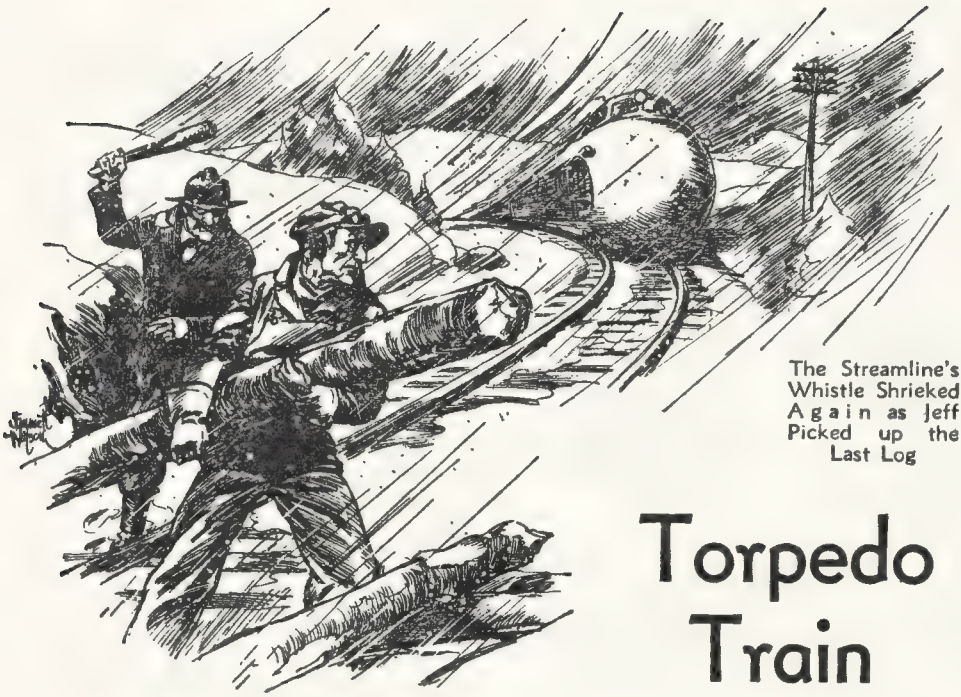
Pensioned

PENSIONED! So swiftly the years have been rolling
That I am an old man, my course nearly run.
Pensioned! The bells of the engines are tolling:
"Thy toiling is over! Thy labors are done!"
Pensioned—aye, pensioned! No longer to feel
The throb of the engine pound over the steel!
Pensioned—aye, pensioned! My labors are o'er,
And I am a part of the railroad no more!

Swift o'er the rails goes the Limited spinning,
Steady, contented, the engine's soft purr;
Happy old engine! Her work just beginning,
But ended forever my journeys with her.
Out from the yards to the wide-open way,
With another in charge of my treasure today;
Strange hands on her throttle, strange eyes filled with pride—
For I have been pensioned and crowded aside!

The semaphores white, or the danger lights showing,
Henceforward what can it matter to me?
What need I care for the switch lights' bright glowing,
Or chatter and clatter of telegraph key?
The board out for flimsies—the "meet" and the "wait"—
The whirl of the Mail and the pound of the freight—
The shriek of the whistles, the wrecking-crew's call
No longer shall stir me—I am out of it all!

L. M. D. O'NEIL.



The Streamline's Whistle Shrieked Again as Jeff Picked up the Last Log

Torpedo Train

The Old Iron Horse Ain't What She Used to Be, Many Long Years Ago

By JOHN A. THOMPSON

Ex-Fireman; Author of "High Water," "North of Nowhere," etc.

OLD Jeff Miller, veteran hogger of the Prairie Division, cautiously opened the super's door. He was expecting a stormy session.

But Superintendent Barrows greeted him pleasantly. "Morning, Jeff. What do you think of our new streamline train?"

Jeff grunted. "Oh, that contraption! Crazy-lookin' dee-vice, ain't she, Mr. Barrows?"

The super's eyes twinkled. He knew that Jeff gloried in whipping the varnished wagons over the rails at whatever the schedule called for, and was known as a fast runner.

"She's designed to do a hundred and ten. Regular running speed ninety." Mr. Barrows paused. "I sent for you this morning because I thought you'd like to handle her, Jeff."

"Me run that blamed piece of fancy clockworks?" The hogger snorted derisively. "Hell, that ain't railroadin'!"

"The operating department thinks differently." Barrows snapped out the words curtly to hide his chagrin. "But I'm not going to argue about it. The run will supplant your present train," he announced. "Our first streamline was offered to you on a seniority basis and because of your excellent record. You can take it or leave it."

Jeff's mind was made up. He eyed

the door uneasily. "Thanks, Mr. Barrows, thanks a lot," he said, "but I don't want the torpedo train."

"Very good. When you go out tell Walter Moore, if he's around, that I'd like to see him." The official lowered his eyes to a sheaf of papers piled on the desk in front of him.

Jeff found Walt Moore in the locker room. Walt was tall and thin, with a sharp nose and a sharp chin. He and Jeff had been friends since their call boy days, when both had used the same dinner pail, and the same bicycle, jointly bought and paid for. They had grown up on the road together, with little Jeff boasting a year's seniority to the day in age and service over his lanky buddy.

Everybody in the locker room knew that Jeff had been in to see the super. Most of them knew why he had been sent for. Walt voiced the question that was on every man's lips.

"Did you take the streamline?"

"Hell, no!" Jeff flung back. "I ain't no danged motorman."

"Attaboy!" shouted Paddy Higgins, a young hogger. "Stick to steam."

Walt stared at his pal with disgust. "Just an old mossback," he muttered.

Jeff's eyes flashed angrily. But he curbed a hot retort on his tongue. "Barrows wants to see you," he said bluntly and turned away.

Thus Walt Moore handled the first streamline over the Prairie Division, and was proud of his job. The graceful, articulated unit approximately two hundred feet long and weighing almost less than a single all-steel Pullman sleeper, flew over the rails with amazing speed and efficiency.

Folks along the right - of - way dropped what they were doing to run down to the company fence and stare at the strange apparition as it flashed by, just as their forbears had watched the diamond stacks rocking along that self-same line in the early days of the West. But there was some prejudice against the new type of train, and even hatred.

On the edge of Pine Grove in an unpainted tumble-down squatter's shack lived Ike Logan. Ike used to watch the "torpedo" go by every day, and hated it. Ike detested all trains. All trains and all railroads, because once he had been caught stealing merchandise from a stalled freight.

Ike had gone to the pen. When his period of incarceration was up, he returned to his hovel at Pine Grove determined to get even.

However, though he threatened much, he did nothing. For a time the railroad bulls watched him closely. Gradually they forgot him. But Ike never forgot the railroad.

DEPRIVED of his favorite run, Jeff Miller bumped a brother hogger and drew down a new job. A change seemed to have come over the old man. He grew irascible, bitter. Jeff didn't work well with his new crew. He still had a fast run, the extra fare "Western Limited," with drastic penalties for avoidable delay. On the third day out, he failed to make the unfamiliar schedule, and could not produce a good alibi.

Younger hogheads said the old fellow was losing his nerve. Jeff blamed his troubles on the new steel monster—the slender streamline torpedo train. Blindly he refused to listen to Walt Moore's enthusiastic arguments in favor of the innovation.

It did no good to tell him that these incredibly swift, light mobile units might eventually prove the salvation of the railroads. They could be adapted

to the movement of perishable freight. They could supplant, with supreme economy of operation, the old local freights and could put the short-hauling of goods and merchandise back on the rails instead of leaving it to the motor trucks on public highways.

Moore also pointed out that these sure, swift torpedo trains running on frequent schedule were even fast enough to give transcontinental air lines a fight for passenger trade.

Many a word battle they had in the locker room, over their coffee and apple pie in the hash house, and wherever the two hoggers happened to meet.

"Let me give some figures, you old hardshell," Walt expounded between mouthfuls of a cheese sandwich. "This Diesel-powered streamline takes only half a thousand horse power at ninety miles an hour to handle a load replacing ten regular steel cars and an old-style jack. The latter has to produce close to thirty-five thousand horse power to get itself and its train over the steel at a ninety gait."

"Maybe," grunted Jeff, leisurely peeling an orange. Suddenly he flared up. "Anyhow, you're a hell of a guy to be teachin' me railroadin'! I forgot more than you'll ever learn."

Walt laughed. "Ain't sore, are you?" He reached out a long, skinny arm to clap his pal on the shoulder.

Jeff twisted away. "Keep your hands offa me," he yelled shrilly. "I don't want no back-slappin' from a guy that'll jump another man's run."

In his mad outburst, Jeff Miller had completely forgotten that he had been offered the streamline first, and that subsequently he had bumped another hogger to get the "Western Limited." Perhaps he *was* getting old.

Estrangement between the two friends widened until everybody on the division noticed it, and began talking. It reached the point where Jeff openly avoided Walt, refused to speak to him altogether.

To make matters worse, Jeff wasn't wheeling the "Western Limited" over the rails to official satisfaction. He bid in another run, but he seemed to spend most of the time in the engine cab moping, dreaming, nursing his hate of the streamlined steel monster that he felt had come to rob railroading of its glory.

He wound up driving No. 44, a three-car passenger local consisting of two creaking, wooden coaches and a combination baggage car and smoker. The jack on the head end was an ancient high-wheeler that had seen its best days before McKinley's administration. The locomotive was reputed to be as cranky as Jeff Miller himself. According to the general consensus of opinion the hogger and his jack made a perfect pair.

Every way station, depot, and wide space on the road between Claremont, the division terminal, and Oatfield, far out on the prairies, was a stop for 44. Jeff didn't mind them. But on the run was one particular meet that made the gorge rise in his throat anew every day. It occurred on the passing track known as Crockett's siding, just east of the big bend around Pine Grove, a heavy thicket of green trees and tangled brush.

Each morning Jeff pulled into that siding and waited until No. 7, the torpedo train, sped by. True to his old habit, he would jump from the cab once his train was safe in the siding. Brown-burned corncob jutting out of one corner of his mouth, his long-spouted oil can in his right hand, he would begin what was for him the solemn ritual of giving his panting,

wheezing locomotive the once-around with oil.

But at Crockett's siding, no matter what bearing was receiving his attention, the moment he heard the streamline's shrill whistle he would go over to the main line side and stand on the track beside his hog, glaring in wrath as the torpedo train swept into view around the bend. In common with Ike Logan, the veteran engineer hated the train of a new generation.

"Sleepy Ned" Wayland, his fireman, laughed at the queer old fellow. Ned spoke to Bert Howe, the conductor, about it. Bert smiled wisely, and pointed a finger toward his head.

"Daffy, I guess."

Still it was no laughing matter to Jeff Miller. To him, the torpedo train was a fiend destined to destroy railroading as he had known and loved it since the days of link and pin.

A COLD wind whistled through the trees at Pine Grove, carrying with it the sting of winter's first blizzard. A rip-snorter was tearing down from Canada. Thick snowflakes whipped around No. 44, waiting on Crockett's siding for her daily meet with the new train. With the exception of old Jeff Miller, the local's crew had adjourned to the baggage car for a few hands of seven-up.

Jeff, with a pair of moleskin ear muffs clapped under his cap and his sinewy body braced against the storm, was oiling around. He had been worried by the poor visibility coming out. More than once he had upbraided Sleepy for not calling out the signals with more alacrity.

Now, in spite of himself, his mind kept reverting to the men at the throttle who were wheeling fast trains on hard schedules on such a day. The hazards of shortened vision were, he knew, increased tremendously at higher speeds. He wondered how Walt Moore was getting on, streaking that danged "torpedo" along the main at ninety per.

Squinting through the gray curtain of driven snow, Jeff peered up the track and listened. Suddenly his body went rigid. He rubbed his eyes and stared at the glistening threads of steel just below the bend.

An extra heavy flurry blotted out the tracks. He waited for the wind to let up a little. There seemed to be something dark and heavy across the main line tracks on ahead.

The wind abated, the fog of white snow lifted momentarily. At the same instant Jeff ran forward. No question of his eyes deceiving him now. A black obstruction blocked the track—*and the torpedo train was due any second!*

It was up to Jeff to prevent the disaster that seemed imminent. A crisis had arisen and the road, his road, needed him. That was the single thought that burned like a torch in the veteran's brain as his feet stumbled and slipped up the snow-covered roadbed toward Ike Logan's shack.

At length he halted at a pile of logs and heavy tree limbs stretched across the rails. Bending down, he exerted all his strength and jerked the first one clear of the tracks.

"If that dirigible had a decent cowcatcher onto her, she might be able to bust through," Jeff said to himself.

The old-timer yanked at another long pine log, tipping it out of the way, just as he heard the streamline's shrill whistle call.

He thought of running toward the bend to flag the speeding train, but a red block was thrown against that futile hope the instant it was born. Jeff had handled too much motive

power at high speed not to be keenly aware of the limitations of braking power, and the distance to an inch required in which to stop a racing juggernaut.

"He'd never make it, even if he did see me," Jeff decided.

Sweat stood out in little crystal beads on his throbbing forehead. He realized that the only possible way to save the train was to clear the tracks ahead of its approach. Almost superhuman strength surged through the little man's body as he stooped and hauled, pried and grabbed at the jumble of timbers across the rails.

He didn't dare look up for fear he would glimpse the streamline, hugging low to the tracks, sweep around the bend. Perhaps that was why he didn't see the sinister form of Ike Logan with an upraised club slinking through the pines behind his back.

Jeff heard the screech of the torpedo's whistle, heard the roar of rolling wheels along the rails. Only a few more logs to move now, and fewer seconds to do it in. Jeff was breathing hard. His fingers were torn and bleeding from clutching desperately at the rough bark and splintered edges.

He thought of the passengers, comfortable and safe behind the shatterproof windows of the streamline, and he was ashamed of his own slowness and lack of strength. More particularly he thought of Walt Moore, and all the days they had been such friends together.

The streamline's whistle was a piercing shriek now. Walt must have seen him. Jeff heard the cry of wheels fighting hard-clamped brakes hastily applied. Another log, just one, then a quick roll out of danger himself and the way would be clear.

Then it seemed to Jeff that a heavy weight suddenly fell on his head. The violence of the blow sent him reeling. But even as he fell, the old hogger's last conscious act was to grab and twist at the one remaining log.

The next instant there was a tremendous crash as the streamlined front end of the torpedo train caught one end of the log, whipped it back against Jeff Miller, and sent both log and engineer hurtling in a sickening arc far out to the right-of-way fence. Jeff's world went black.

WALT MOORE, in the van of the torpedo train's crew, found his former comrade by the fence.

"Jeff, you saved the train," he whispered hoarsely. Then louder: "Jeff! It's Walt."

Not a muscle moved, not a nerve twitched in the little man's mangled body. Walt bent over closely, swallowing hard at the lumps that rose in his throat. People were crowding around.

"Who is it?" asked Con Foley, skipper of the streamline.

"Jeff Miller. Get out of my way, damn you, and let me take him back to the train."

"Was he killed?" Con began clearing a passage through the crowd.

"I—I don't know yet."

He laid Jeff down in the rear passenger compartment. "He's still breathing," said Foley.

A brusque, efficient man stepped forward from the group of passengers. Handing his card to Foley, he bent over Jeff and began a professional examination.

"Get me some clean towels, warm water, and a basin out of the buffet-kitchen," he commanded. "Then clear these people away from here. Let's give this fellow a fighting chance."

Foley sent a trainman for the stuff. Walt Moore plucked at the skipper's sleeve. "That guy a doctor?" he inquired.

"Dr. J. B. Forbes, the big surgeon," Foley replied.

The doctor looked up. "This man has a fractured skull," he said seriously. "There's just one chance in a thousand of saving his life. If I can get him into Claremont and onto the operating table within thirty minutes—"

He turned to Walt.

"You're the engineer of this train, aren't you?"

Walt nodded. He was making rapid mental calculations. Pine Grove was approximately fifty miles from Claremont terminal. A half hour wasn't much time. But Walt knew the power and speed in that Diesel motor up ahead. He'd snake the torpedo train over the rails as she had never been snaked before.

"Okay, Doc," he said abruptly, and dashed forward to his place in the control room.

The wild speed of the streamline as she rocketed toward Claremont was like red wine in Walt Moore's veins. Notch by notch he opened up the 600 horse-power V type Diesel motor until telegraph poles slid by as a solid fence and the landscape was just a blur.

No train before ever travelled over steel as the torpedo travelled then. In spite of a brief stop at Winchester, the first telegraph station on the way in, while a crisp report was wired to Claremont and a clear line being obtained, Walt Moore rolled into the division terminal a good three minutes ahead of the deadline set by Dr. Forbes. A waiting ambulance rushed Jeff Miller to the hospital. The operating room was ready.

Jeff pulled through. Old rails are hardy creatures. But it was some time before visitors were allowed into the private room secured and paid for by the road. Superintendent Barrows and Walt were Jeff's first guests.

Jeff lay between clean white sheets, bandaged almost literally from head to foot. The superintendent finished telling about the capture and trial of Ike Logan.

The court had declared the man dangerously insane and sent him away where his warped mind could do no further harm. Jeff fidgeted during the recital.

"I was thinkin', Mr. Barrows." The little hogger smiled wistfully. "I mean—if you was to put on another torpedo train—I'd kinda like to bid in for it."

"Number Four is going to be changed over to a streamline next month." The super winked broadly at Walt Moore. "But I thought you didn't approve of these—er—new contraptions, Jeff."

The patient flushed. "Well, I'll tell you, Mr. Barrows," he said eagerly. "I may be an old fossil but danged if I'm too old to change my mind."

"What's more," went on Miller, "anything that can make Claremont terminal from Pine Grove in thirty minutes is railroad enough for me." He turned to Walt Moore. "There's just one thing bothers me about them torpedo trains, Walt. How the devil can the con stand on the steps and wave a highball to the hogger, when the danged steps fold up inside and the doors close before the train starts?"

Walter Moore and the super laughed together.

"That," said Barrows, "is something you'll find out soon enough for yourself, Jeff—when you're wheeling Number Four."

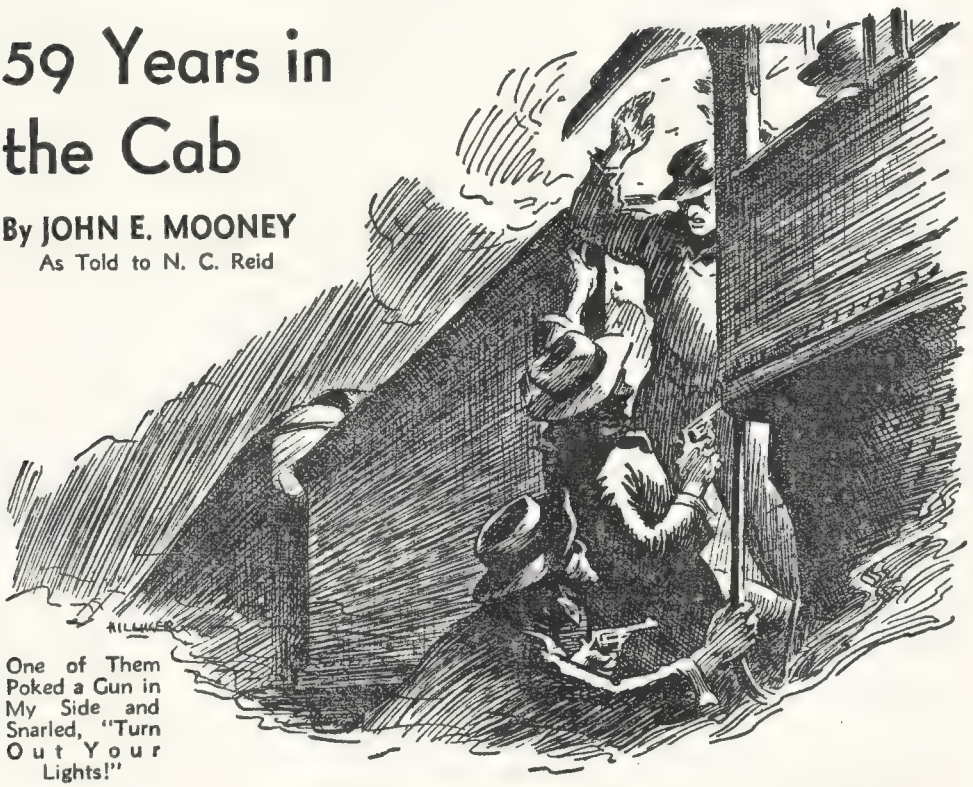
TRUE TALES OF THE RAILS

Actual Happenings Told by Eye Witnesses

59 Years in the Cab

By JOHN E. MOONEY

As Told to N. C. Reid



One of Them Poked a Gun in My Side and Snarled, "Turn Out Your Lights!"

THE night of August 5th, 1903, stands out vividly in my memory. It was a wild night, dark as a coal chute. A heavy rain was falling and the wind filled the deep cuts of the Illinois Division of the Burlington with hideous screeches.

It was such a night that a railroader would choose to sit by his fireside. Too, it was just such a night that a desperado might choose to pull a holdup.

I was pulling passenger in Northern Illinois, hitting only big burgs, with an occasional stop on flag. The engine barked as it bucked a head wind. I sat in the cab window, my eye on the line ahead, and without a thought in my mind of trouble—that is, no more thought than those which a railroad hoghead usually has with him.

We had just crossed a long trestle over Little Indian Creek when my fireboy, Jack Corrigan, yelled: "Flag at the station!"

I leaned further from the cab. Sure enough there was a white light swinging across the track at Marcus, a flag station a short distance ahead.

"Poor devil, out in this storm," I

thought as I gave the engine a service application of the air brakes. As we slid to a stop, I saw we were getting two passengers instead of one, and most unusual they proved to be, for two masked men sprang up the gangway ladder. One of them poked a gun in my side, and snarled, "Turn out your lights!" They had me and my fireboy covered with heavy guns. I didn't ask for credentials; I felt them sticking into my ribs. I doused the glims and waited.

"Get goin'," he commanded. "My name's 'Foxy.' Maybe you've heard of me." I had heard of him and none too favorably.

We shot past the green lights at Marcus with a dark engine. Five miles beyond as we approached a blind siding, I saw a red light gleaming on a switch target, and immediately after, a dull report of an explosion struck my ear. I knew the safe had been blown in our express car!

"Shut off!" snapped Foxy. "See that red light ahead?" I gave the engine the works and we headed into the siding. I knew now they were cutting my train in two, and I had a hunch it would be right behind the express car.

We were now in a deep cut; heavy woods all around us; an ideal place for a holdup, now that it was happening. One of the bandits slid from the gangway and ran back along the train.

"All right," I heard him yell. He had lifted the pin between the express and baggage cars. Just then, Foxy growled at me: "Let's go!"

We ran down through the siding and waited at the end for the other bandit to open the switch. On the main line again, we headed for I didn't know where with my engine and one express car.

A few miles on Foxy called to me to stop.

"Slide out of here, you guys," he snarled, "back to the express car!"

CORRIGAN and I were herded along in the pouring rain, in front of the two bandits. When we reached the express car I wasn't surprised to find the door open and the messenger lying unconscious on the floor, while two more of the bandits were at work on the contents of the safe.

"Hop in there, you fellers," snarled Foxy. "Get your faces to the wall!"

By their exclamations, I knew the gang had hit us with a big load of coin. My curiosity got the best of my judgment; I turned my head a bit to watch what was going on.

Then something hit me. I felt like as though I had been tapped with a pick handle—it was a staggering blow from Foxy's gun!

"Straight ahead, feller," he growled.

After the safe had been cleaned, Corrigan and I were herded back to the engine. Foxy ordered me to get going. Several miles down the main stem, he called to me to stop. As the bandits prepared to unload, Foxy pushed his face close to mine.

"Sorry, feller, that I had to rap you back there in the car. Just a part of the game, you know. Here's a little something for salve for that cut on your head." I felt his hand in my overall pocket, but I was too busy with my engine to investigate at the time.

I gave a big sigh when I saw the last bandit down the ladder, but my sigh was cut short by a gun shot.

"Foxy!" a voice whined. "What the hell ye pluggin' me for?"

"Jim, I didn't mean to shoot you," Foxy exclaimed. "Honest, it was an accident. I didn't mean to do it!"

Three bandits scrambled up the side of the bank toward the timber, leaving one poor devil dying there by the track. A few minutes later, Corrigan and I loaded the limp form of the bandit into the express car alongside the unconscious messenger. Then we backed up for our train. When we showed up at the next station we were two hours late.

A check-up on this robbery disclosed the fact that Foxy and his gang had gotten away with $75,000, and I wondered at the time if Foxy hadn't been doing a little arithmetic when his gun "accidentally" split that loot among three bandits instead of four!

I never did find out for sure, although I did meet Foxy again, several years later, when I was called as a witness in a murder trial.

Foxy had been trapped at last, and was being tried by the State of Illinois for the murder of that bandit who died alongside my engine the night of the robbery. I proved to be what they call a surprise witness, for I told exactly what I heard Foxy telling his dying partner: that the shooting was an accident. I didn't want to protect the bandit, but I simply told the truth. My testimony not only disgusted the prosecuting attorney, but it saved Foxy from dying at the end of a rope.

However, he got life in the pen at Joliet, and among my souvenirs, I keep a note written by Foxy in which he thanks me for being what he termed a "square guy," and, pinned to this note is a twenty-dollar bill—the salve he slipped into my overall pocket that night of the robbery!

BUT running an engine isn't all train robberies and tragedies. It has other thrills and big moments. I think the incident that stands out now as the highest point in my life happened one bright day late in February, 1861.

A noisy crowd had gathered at the Buffalo & Erie station in Buffalo, New York, to greet Abraham Lincoln, president-elect who was en route to his inauguration in Washington. Everybody and his cousin had come from miles around.

I was a newsboy with an armful of papers and I jostled my way through that excited mob, right up to the front. I stumbled and found myself sprawled alongside the tracks. Almost instantly, I felt myself being hoisted by the band of my home-made trousers. Then I was set right side up.

I gasped and stared into the face of my rescuer; it was, I thought at that moment, the homeliest face in the world, but immediately it was a big smile, and I was looking into the kindest face I had ever seen. His voice was cheery when he said, "Well, well, little lad, this is a big crowd for you, isn't it?"

He reached into the pocket of his baggy trousers and drew out a coin. He bought one of my papers. That man was Abraham Lincoln.

Two years later I secretly enlisted in the Civil War. Of course, my father was the first to hear of it, and he set the brakes heavy against it, but by way of compromise, he chucked me into railroading as a fireman on the Buffalo & Erie, now a part of the New York Central.

In those days, all engines had names; my first one was called Hercules. I liked that name; it increased my chest expansion. It was a wood burner. We kept the tender filled by halting along the route, and cutting down trees on the right-of-way.

Then came the day that I was called out for a run. I sat in the fireman's

seatbox of an engine that pulled a single car. There were no passengers aboard my train; no one but the crew, but, following us came a train bearing the remains of Abraham Lincoln to his last resting place.

All along the way, cities, buildings, bridges, and farm houses were draped with mourning, and the rain fell during my entire run over the Michigan Central into Chicago. I am not ashamed to say that I wept. I was reminded of my first and only personal contact with a man who in an hour of triumph could stoop to do a kindness for a little newsboy.

And now, as I sit on the siding, a Burlington veteran, I wonder if the railroading of the past half century didn't contribute more to America's progress than railroading can in the years to come.

Slim Gordon's Alibi

By FRITZ LEE

BECAUSE most men most concerned are still working for the company, I am not going to use their true names. I'll call the engineer "Slim" Gordon, and myself Fritz. For the same reasons I won't use the real names of the stations. There is only one railroad passing through these towns, hence to name them might tip off the officials to the identity of the culprits, if they can be called that. Suffice to say our trip started from Los Angeles, helping a hot shot, or fast freight.

Usually the helper went as far as El Cajon. This time, however, we were cut off at Morgan, going only about half the regular helper distance. We got in the clear on the house track and went into the operator's office. The dispatcher didn't have any dope for us as yet, so we decided we had plenty of time to go up the main line, take water and get back on the house track ahead of No. 42, the "Chicago Limited."

As I stood on the spout taking water I searched my pockets for cigarettes. "Oh, Slim," I called, noticing the engineer on the ground with his oil can, "when I get through taking water I wish you would pull up to that little store. I am all out of smokes and would like to get some."

"O. K.," said Slim, and went on about his oiling.

One hundred and fifty yards beyond the water tank, over on the boulevard that parallels the right-of-way, was a small store selling soft drinks, candy and tobacco. Slim pulled the engine up to it, and I ducked between the barbed wire of a fence and made my way through the weeds to the store.

It was early morning, and the storekeeper, who lived in the rear of his shop, was just opening up for the day's business. Evidently he had not taken the small silver from the family sock and placed it in the till, for he had to go to his living quarters and rummage around to find change for a dollar bill. It took quite a while.

While waiting for my change and cigarets Slim waved his arms wildly and shouted, "Hurry up, Fritz."

"Just a minute, Slim," I called back, "till I get my change and cigies."

"Never mind that," he roared. "Forty-two is waiting at the block now and—" I didn't wait to hear the rest.

Leaving my gloves, cigarets and money behind, I made a grandstand rush for the right-of-way, through or over the barbed wire fence and straight for the passing track switch, which stood about 20 feet back of the engine.

The local from the Bellmont branch was standing on the adjoining track, her crew taking in the whole performance. One of the brakemen from the local ran over and lined up the derailer as I lined the main line switch. Slim backed in the clear, and we lined the switches back for the main again.

Up to now I had not had time to see what was going on, but I knew Slim and I had completely forgotten about No. 42. There it was, standing at the lower end of the block and her flagman half way up to us already. I waved a frantic highball. No. 42 called in the rear flag, and after waiting for him to return, started out, picking up the head flagman when they came to him. As their engine came past us, "Smoky" Peters, their hogger, held up his watch, gave a yard signal indicating six, and shook his fist.

"So we layed them out six minutes," I remarked to Slim. He didn't answer, but made a bee-line for the local, standing on the branch. In a few minutes he returned.

"Well, I got them hushed up," he said. "They didn't see nothin', didn't hear nothin' and don't know nothin' about us or Forty-two."

"That helps a little," I said, "but the next thing is a suitable alibi. Do you know of any that aren't as old as the hills?"

"You think I'd be runnin' one of these things if I could think that fast?" asked Slim. "Hell, no! I'd be a diplomat."

"If we tell them the truth," said I, "it will just cost us our jobs, and if we don't think up a damned good alibi it will be ditto."

"Don't I know it," said Slim.

WE pulled down to the station and got orders to run light back to Los Angeles. Slim talked to the operator. Fortunately they were the best of friends, and the operator decided that he didn't know a thing about No. 42 standing at the block so long, as he was busy getting out some orders.

All the way from Morgan back to Los Angeles Slim and I sat there trying to think out some sort of an alibi. About the time we were entering the outskirts of the city a bright idea struck me.

"Slim," I asked, "did you ever hear of a Johnson bar sticking enough so that you couldn't hostle her back and forth?"

"No, not that I recollect," he answered.

"Then why not tell them that you could not hoist her over, and that while you were trying to get her in reverse I was on my way back to flag?"

"I'm afraid we'd have a hell of a time ever convincing the brains of any such thing," he replied.

"I don't know of anything else to tell 'em," I said, "and, besides that, it is something that hasn't been used before. At least neither of us ever heard of it. Anything you want to say, though, I'll stick by you."

After some thought Slim decided, "I guess that is as good as anything else we might tell them. We'll stick to it."

Naturally the conductor on No. 42 wrote up the delay, and Slim got a

letter about it. He answered it, telling them just how hard a time we had in trying to reverse the engine and how I eventually went back to flag; how, after numerous moves ahead for a few feet at a time, he had finally managed to throw her in reverse.

Although neither Slim nor I knew it at the time, they sent our engine to the shops and gave her a good inspection. There was nothing more said about the matter—that is, for about five weeks or so.

I chanced to be in the roundhouse office when Slim came in and looked through his mail. There was a letter for him from the super's office. Slim read it and then re-read it.

Eng. S. E. Gordon:

Your personal record has been assessed ten (10) demerits. According to your written statement of Nov. 3, 1908, you delayed No. 42 at Morgan for six minutes in attempting to reverse the 2676. On close inspection of the 2676 we find that, due to improper lubrication, the valves were so dry as to cause them to stick. Please give more attention to such matters in the future.

W. H. Whaller,
Supt., Southern Div.

"Well, I'll be damned," was all that he said.

The Boomers' Corner

JAMES DEEGAN'S story, "The Pullman Strike Mystery," in your August number, brought back memories of days long past but not forgotten. I used to know Mr. Deegan in 1908 or 1909 when he was night engine inspector on the old Central Mexicana at Chihuahua. At that time I was roundhouse foreman there. After that I went over to the Chihuahua & Pacific, which has since been renamed the Northwestern Railroad. There I stayed until 1913. Later I worked in a shop at Oroville, Calif., then went to Stockton and ran an engine on the little Tidewater Southern Ry. between Stockton and Modesto. When they electrified that road I got jobs in Nevada, then New York City. I was hired to go to Argentina, South America, but was held back by the World War. Now working for the Texas Co. in Puerto Rico.

Regarding Deegan's story: I was a delegate to that ill-fated convention of the American Railway Union at Chicago in 1894 and knew Gene Debs. It certainly was a bad mistake for us not to have followed Debs' advice; we could have avoided a lot of trouble. Would like to hear from other old-time A. R. U. men—G. L. ("MIKE") ENGLEBRIGHT, Box 3412, Santuree, Puerto Rico.

* * *

My friend, the late Gene Debs, had a pocketful of annual passes over nearly every trunk line in America. One day I met Debs in Terre Haute, Ind. He steered me over to a hotel, asked if I wanted a drink, and bought me a whisky, although he refused to drink anything himself. Then he took me down to the depot and when the Limited came in he held up his finger once and pointed to me. The conductor answered the signal and I got on and rode to Chicago, with no questions asked.—JAMES DEEGAN, 1851 Brooks Ave., Los Angeles.

I have just returned home from a "tour" of Minnesota and Iowa, principally over the Milwaukee Road, bumming my way. Many a time a "rail" has called me into an express car or baggage coach and given me a good lunch.

Most men out of work who steal train rides are "ex-rails," "no bills," "extra-gang stiffs," or those who follow railroading in some way or other. Many serious accidents have been prevented by such riders, who, upon discovering a defect, have warned the crew or agent. A few weeks ago a wreck was prevented on the Frisco Lines at Aurora, Mo., when one of these riders found a safety beam sticking upward in a tie. It had been driven into the tie by a passing train which had dropped it. The rider gave his name as James Theodore Collins, Wisconsin Rapids, Wis.

I agree with Roy Larsen's recent letter. Many people, including women and children, ride the "rattlers" free and undisturbed.—JAMES HATFIELD, 3725 Somer St., Kansas City, Mo.

* * *

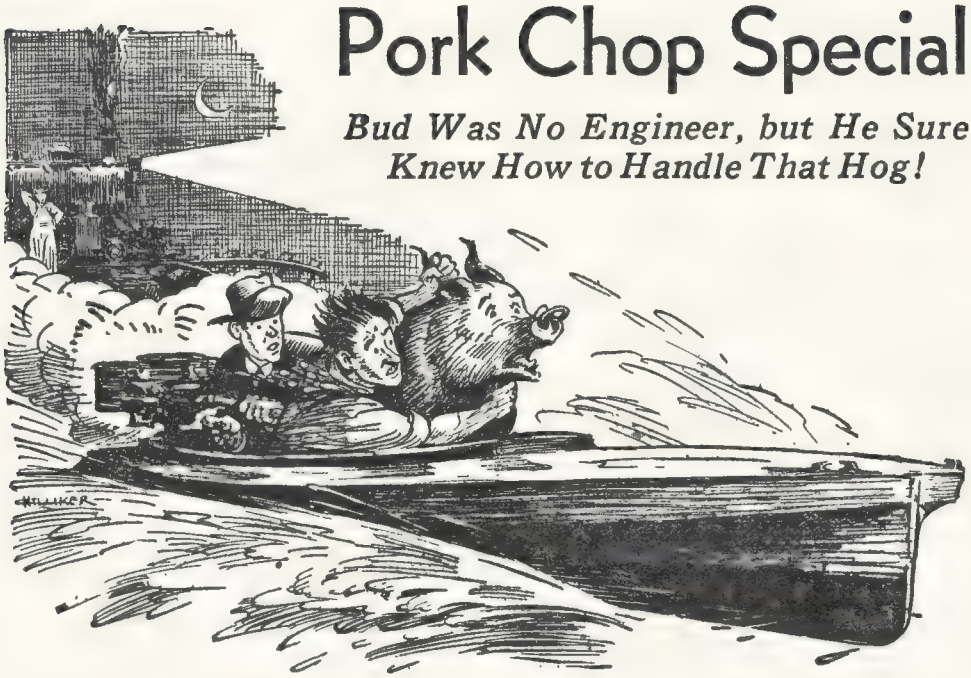
Veterans of the 31st Ry. Engineers of the A. E. F. are holding their fifth annual reunion at Chicago, Oct. 2 to 5, with headquarters at the Midwest Athletic Club.—D. E. BENJAMIN, president, 4116 W. Monroe St., Chicago.

* * *

Where can I get information on the old Prospect Park & Coney Island Ry.? I have a map of Brooklyn, dated 1900, showing the route of the railroad as running from 5th Ave. and 37th St. to Gravesend Ave. and 37th St. These tracks are now used by the B.-M. T. Lines for freight transfer service. The B.-M. T. shops and barns were then at Gravesend Ave., at 9th and 10th Avenues, and at 20th St. alongside Greenwood Cemetery.— J. BROWN, 1041 39th St., Brooklyn, N. Y.

Pork Chop Special

Bud Was No Engineer, but He Sure Knew How to Handle That Hog!



By JOHN A. SAXON
Former Telegraph Operator, Chicago & North Western

OLD Eph Wiggins, stock-raiser extraordinary and leading citizen of Miltonville, banged on the table of his office in the Wiggins Grain Elevator and glared at Bud Mallory, the young agent of the K. S. C. Railroad. A tinge of red mantled the old man's sparsely covered scalp and his Adam's apple bobbed nervously.

"'Tain't no use, young feller, I ain'ta goin' ter do it. Jes' as long as the G. N. W. handles my business ter suit me, they're goin' ter get it."

The muscles along the under jaw of Bud Mallory's clean-cut face stiffened ever so slightly.

"But, Mr. Wiggins," he persisted, gently. "Surely you can spare us a few cars. Last year you shipped nearly a hundred cars of grain and stock out of Miltonville, and the K. S. C. didn't handle one of them. That's not fair, is it?"

Wiggins recoiled.

"What ain't fair?" he demanded, belligerently. "Did I ask your durned road to come into Miltonville? Did I?"

"No, Mr. Wiggins, you didn't, but the community—"

Old Eph snorted.

"Humph! *I'm* the c o m m u n i t y around here, young feller," he asserted, his tone a trifle less choleric. "If 'twarn't for my bank and my elevator and my ranches—there wouldn't be any Miltonville. Would there? Heh?"

Bud Mallory knew he was losing the argument, even as he had lost it a dozen times in the last six months.

Back of old man Wiggins' cantankerous expression, as though projected on a motion picture screen, Mallory

read the words of the letter which was then in his pocket—the letter that had prompted him to make one more try to secure at least a portion of Wiggins' business.

For the reasons above enumerated, Miltonville station will be closed as of September 30th. You may report to this office for reassignment in accordance with your seniority.

Dimly, as through a haze of words he heard Wiggins' final remark:

"If they closed their durned station tomorrow, it wouldn't make no difference ter me!"

Mallory could readily believe that.

But it *did* make a difference to Bud Mallory. It meant the boomer trail again. Humph! No wonder nobody had tried to "bump" him at Miltonville. Five men with more seniority than Mallory had passed the bid when the job was posted. Well, the hell with it. Maybe he could go back to the Western Union and put five on a line.

With a final look at old Eph Wiggins' uncompromising, weather-beaten face, Mallory jammed on his hat and took his departure.

As he stepped onto the sidewalk in front of the building he came face to face with Jerry Martin, the young operator-agent of the G. W. N. Hanging upon Martin's arm, gazing soulfully into his face, was Janet Wiggins, only daughter of the leading citizen of the one-man town.

Mallory responded to their casual greeting and walked to the K. S. C. station, nearly a mile from the center of town. Wiggins had seen to *that* also.

What chance did the K. S. C. have against an old man's unreasoning prejudice and the added handicap of the opposition's entry into the very bosom of the Wiggins family?

INSIDE the station Mallory slumped into the chair in front of the telegraph table, with a glance at the clock.

5.20 P.M.

No. 6 was due at 6.03, but she didn't stop at Miltonville. Only twice had Mallory taken alvantage of the tiny "f" opposite it on No. 6 timetable. Once a traveling man had asked that the train be flagged so he could make a connection in Kansas City; another time Mallory himself had been called in to the general freight agent's office.

Outside the window Mallory saw that the early afternoon drizzle had at last developed into a steady downpour. From earlier weather reports going over the dispatcher's wire he knew it had been raining farther east.

Well, he might as well close up.

He set both boards at clear and jammed his arms into the sleeves of a slicker hanging on the wall. Then, with his hand on the door, he hesitated.

A message was going over the train wire addressed to the dispatcher at Cedar City.

Rocky River foreman reports water rising rapidly. Have called out extra gang in case of emergency.
Bradford, HU.

It didn't interest Mallory. Rocky River was sixty miles east, where the K. S. C. crossed into Missouri forty miles north of Kansas City. His troubles were closer home.

The phone rang. Mallory thought it was the dispatcher's line, but when it rang again he knew it was the town phone. No wonder he hadn't recognized it.

"Hello. K. S. C. station," he said into the mouthpiece as he lifted the receiver from the hook. His brows knit incredulously as he recognized the voice.

"Oh! Mr. Wiggins. You've

thought it over? Yes, sir! A car for a shipment of blooded stock? No, we haven't, but I can get one for you right away."

At that moment Bud Mallory would have promised to spot a Pullman on Wiggins' front doorstep.

"For shipment to Kansas City tonight," he repeated. "One carload blooded stock and attendant. Yes, sir."

Dazedly, Mallory hung up the phone. Just where he was going to produce a box car from in time to have 204, the fast freight due at 11 P.M., pick it up, he hadn't the foggiest notion.

But this much he did know: after six months of tireless effort on his part, Wiggins was going to make a shipment. That meant his job was safe until there was no hope of getting more. Wiggins' last words over the telephone still tingled in his ears:

"If you can handle this shipment, young feller, there *might* be more."

Mallory made a dive for the telegraph table. Getting the division office at Cedar City, 90 miles west, on the wire, he asked:

"Is the C. D. there?" Then after a pause: "Get him on wire, please."

When Mallory heard the "I-I-SC," the personal sine of the chief dispatcher, his rapid Morse tumbled out the information.

"Wiggins wants to make a shipment on 204 tonight. Pedigreed stock for K. C. Need car for 8 P.M. loading."

He closed his key hopefully. For a moment the line stood open. Apparently the chief dispatcher was doing some figuring.

"Car clerk says only available equipment is on siding at Henderson. No way of getting it to you before 204. Sorry."

Bud groaned. Henderson was twenty miles west and he realized only too well even an extra crew from Cedar City couldn't pick it up and spot it at Miltonville in time.

Then the thought flashed into his mind—No. 6. But even as he reached for the key to make the almost impossible suggestion, he heard Carlisle report No. 6 by. Mallory tapped aimlessly for a moment on the key and with a slow "I-I-OK," he closed the switch.

HANDS plunged deep in trousers pockets, he was the picture of dejection. After six long months of effort to have success within his grasp —and then to lose it because of inability of the line to furnish a box car! He knew at that moment there were fifty empties strung along the division. Why couldn't there be one at Miltonville?

Suddenly the phone rang again.

"Yeah, K. S. C. station," answered Bud, his voice betraying his despair. He listened for a moment.

"Oh, Martin? Sure I can flag her. Who for?"

Then after a heavy pause, during which the agent for the opposition road did the talking:

"Oh, Wiggins. O. K."

He hung up the phone and stared at it momentarily. No. 6 was due in fifteen minutes. He walked across the floor and set the board to stop the passenger train. Would wonders never cease? First Wiggins turns a shipment to the K. S. C., and then he rides the road himself! Something queer somewhere. It wasn't like old Eph to change *that* quickly.

But Bud Mallory wasn't asking questions. Right at that moment he was wondering where he was going to get that car for Wiggins' shipment.

While he was still pondering that momentous question, he heard the chime of No. 6 as she whistled at the curve a mile west.

Two short blasts told him the engineer had sighted the board. But no sign of old man Wiggins. If he failed to show up after Mallory had flagged the train there would be more explaining and something else to chalk up against the jinx of Miltonville station.

The fast train ground to a stop. A Pullman door opened and the train conductor stuck his head out, inquiringly.

Meanwhile, Jim Hart's City Taxi No. 1—the only one, in fact—wallowed through the greasy mud and stopped at the east end of the platform.

Eph Wiggins jumped from the taxi and ran for the Pullman door a white-coated porter had thrown open.

"I'll get my ticket on the train," he yelled at Mallory as he scurried across the platform. "Much 'bleeged for handling that stock shipment tonight. The boys will load up about eight o'clock."

The porter banged down the platform of the car, the conductor raised his hand, and No. 6 was on her way east.

"Looks like the Wiggins family is getting darned friendly toward the K. S. C. all of a sudden," said Mallory, turning to Jim Hart, the taxi man, as they stood in the protecting overhang of the station roof and watched the red lights on the rear of No. 6 as they faded into the rainy night.

Jim Hart chuckled.

"Well, why not, when the K. S. C. is the only railroad in town? The old man wouldn't miss that stock show in Kansas City if he had to swim."

Mallory looked up quickly. "What do you mean—the only railroad in town?" How many times he had wished that were true!

Hart spat indolently into a pool of water at the edge of the platform. "Gosh! Ain't you heard? The G. W. N. bridge over Rocky River went out at three o'clock this afternoon. All their eastbound trains is being held at Morrisey."

Bud Mallory pursed his lips into a soundless whistle. So *that* was it. Well, any kind of a break was better than none at all. But even so, what was he going to do about it?

THE wind increased. Sheets of rain, lashed by a forty-mile wind, whipped along in the wake of the departing train.

"Kind of a bad night, Mallory," commented Hart, buttoning his coat under his chin. "I'll be gettin' back. Want to ride over?"

Mallory shook his head. "That wind is sure a heller tonight," agreed the operator.

Jim's laugh was like a cackle. "You know the old sayin', Bud, he said.

"Out in Kansas, so they say,
A man can spit to Ioway—"

Mallory cut in on the old jingle with an exclamation. "Hell's bells, Jim. I've got it!" He pounded his right fist into the palm of his left hand.

"You mean you've got *them*," chuckled the taxi-man.

"This is serious, Jim," insisted Mallory as a plan formulated rapidly in his mind. "How far is it to Henderson by the county road?"

"'Bout twenty miles, ordinary; 'bout thirty tonight—twenty ahead and ten slippin' back."

"How long would it take you to drive it?"

Jim Hart's jaw dropped. The bantering tone left his voice.

"Who, me?" he demanded shortly. "I ain't drivin' to Henderson in a rain like this for no man." With that he started for his cab.

"Five bucks, Jim," wheedled Mallory. "Will you do it?"

"Cripes, Mallory, you're crazy. We couldn't get through the mud, and besides—"

"Five bucks," insisted Mallory. "Cash."

Jim Hart hesitated, and was lost.

"All right," he agreed, "but I think you're a dang fool. What's the idea? Ain't nothin' in Henderson but a sidin'."

"That's just it," replied the operator, enigmatically.

Jim Hart stared at the railroad man. Surely he was crazed. But five bucks was five bucks.

Mallory dashed into the station and set both semaphores at "stop." Then he opened the dispatcher's wire and reported the arrival and departure of No. 6.

"Take a message please," he tapped on the key.

ESC—DS.
Have 204 pick up car stock KC tonight sure. Other shipments depend prompt handling.
Mallory—MO.

"OK-DS," snapped the dispatcher. "Where'd you get the car?"

Mallory's heart sank. He had feared that question. For the fraction of a second his hand trembled before he pressed the key again.

"Shipper agrees to use equipment available."

He trusted to luck and the fact that the dispatcher was busy to get by with the fact the car clerk knew there was no car available at Miltonville, and hadn't been for weeks.

"O. K.," replied the dispatcher. "I'll have 204 pick it up." He started calling Langdon yard office to send the necessary message to the conductor of No. 204.

Mallory breathed easier. In the absence of ESC, the dispatcher was the last word on the pickup. He looked at the office clock. No. 204 was due at 10.30, and he still had two hours to put his plan into operation before Wiggins' men would arrive to load up.

"Let's go, Jim," he called to the taxi man as he slammed the station door.

"It's a durned fool idea Bud, even if you are payin' me five dollars," complained Hart as the car slithered through deep mud. "I lose my supper and—"

"Quit fussin', Jim," ordered Mallory, holding to the side of the car as it slid off the top of a slippery shoulder. "Five bucks will buy you the best supper you have had in a month—when you get back."

"Yeah, but I wish you'd tell me what you're goin' to Henderson for on a night like this." Then with sudden suspicion:

"You ain't goin' to make me wait aroun', are you?"

Mallory shook his head. "No. In fact, I'm not even going back with you."

Hart pulled a side-curtain awry and spat his disgust into the storm as the car lurched through the mud.

"Plumb nuts," he sighed, as much to himself as to his passenger. "Plumb nuts."

IT was 7.35 when Jim Hart brought the rickety old car to a steaming halt beside the switch light that marked the east end of the siding at Henderson. The rain had eased up a little, but the wind was blowing fiercely.

"Here's your five, Jim," said Mal-

lory, handing the bill to the taxi man as he stepped from the automobile. "Will you do me one more favor?"

"Well, I dunno," Hart hesitated. "If you want I should wait around and miss my supper—"

"It won't take you five minutes," promised Mallory.

Hart brightened perceptibly.

"What is it?" he asked, guardedly.

"Have you got a tow-rope?"

"Got a piece of quarter inch wire cable."

"Better yet. Drive the car up here close to the sidetrack and help me get this box car started."

"Started where?"

"Down the hill," explained Mallory, patiently. "We need this car for a stock shipment tonight. There's no way of getting it to Miltonville except to let wind and gravity roll it down the hill."

"Humph!" Hart was plainly skeptical. "If you wasn't workin' for the railroad, mister, I'd say—"

"Come on," Mallory cut in. "Let's get her rolling."

He unlocked the switch and handed the open lock to Hart. "After I get her out on the main line," he explained, "you close and lock the switch."

The operator cut the block from under the front wheels by kicking it loose. He climbed to the car roof, and, using the same piece of short two-by-four as a brake stick, he set his toe against the ratchet and released the brake.

Once more on the ground, he helped Hart fasten the tow rope to the front end of the box car in such a way it would release and drop off once the car started to roll.

Then Hart put the taxi in low and opened the throttle. The wheels of the old car spun in the mud, but the box car did not move.

Mallory opened a section foreman's tool box back of the switch stand and took out a pinch-bar. He slipped it under the back wheels and yelled for Hart to try again.

Slowly the box car began to move.

"See you in Miltonville," cried the operator, catching the ladder and climbing to the roof again.

As the car rolled out onto the main line, Mallory caught a glimpse of the green lens of the switch target as Hart closed the switch behind him.

Slowly at first, then gaining momentum with every turn of the wheels, the box car gained speed.

Mallory knew there were only two curves between Henderson and Miltonville, and he felt sure the car would not gain enough speed to become unmanageable. But the operator reckoned without the wind.

By the time the car had traveled a third of the distance it was careening madly from side to side and the operator was beginning to wish he hadn't undertaken the trip. With the wind behind, the car dashed onward at a speed that caused the rain to whip against Mallory's face like stinging pellets of gravel.

He struggled at the wheel of the hand brake, but the brake shoes slid over the wheels as though they were greased. Forty miles an hour!

Mallory did not even dare to venture a guess at the speed.

Roaring across trestles, crashing over cattle-guards, the car tore through the night. Vainly struggling at the brake-wheel, the operator sought desperately to check the mad flight. Through the night he caught the faint twinkle of the lights of Miltonville. The curve!

Mallory found himself vaguely calculating velocity. The car would jump

the track toward the right. Therefore his only hope would be to leap to the left as it jumped the rails.

Then with a crash they were into the curve!

Flanges screamed and the operator forgot all about jumping as he continued to twist madly at the brake-wheel.

With a lunge, a wild pitching that could be likened only to a ship in the grip of a storm, the car swung around the curve, its trucks tearing at the sturdy rail. But it stayed upright, and the terrific impact served in a measure to check the speed.

A mile from the station Bud had cut the speed down to thirty, then twenty. He exerted his last ounce of strength to get another notch on the ratchet.

By the time they passed the west switch at Miltonville the car was barely moving. It stopped three feet from the siding target.

Mallory climbed down and eased his aching fingers. Then, with a pinch-bar, he worked the car up to the stock chute and closed and locked the switch. Despite the raw wind and drizzle, Bud Mallory wiped a cold perspiration from his brow. But he was exultant. Now let them bring on their stock!

ABOUT 9 o'clock the operator heard the honking of an auto horn and went out on the platform to find one of Wiggins' trucks.

"Where's that car for Wiggins?" demanded the driver.

"Over at the chute," answered Mallory. "Where's the stock shipment?"

"In the truck."

Mallory stared at the driver. "In the truck?"

"Sure! Wiggins' Pride, the finest Berkshire hog in Kansas."

Mallory's hand went to his head. "You mean—one hog?"

"Sure!" reiterated the driver. "The old man went to Kansas City to show this one himself. He expects to take every prize at the stock show with this baby."

"But Wiggins asked for a car," protested the operator weakly.

"It's a wonder he didn't ask for a Pullman," came the reply. "He thinks more of this hog than anything he owns."

Bud was speechless. This was just a little too much. Still, he thought, if Wiggins wanted to pay a carload rate on one hog, the handling of that hog must be pretty important to Wiggins.

"Who's going with it?" asked Mallory, swallowing hard.

"I'm the guy," replied the driver. "My name's Harvey. What's yours?"

"Bud Mallory," answered the operator, with a friendly grin. "Guess I'll go along, too, seeing that this shipment is so darned important to Wiggins."

"That's fine," responded Harvey. "That makes three of us."

Mallory went back into the office and made out a waybill. His pen poised for a moment and then he wrote, "One hog, M. C. L."

Then he waited.

At 10.30 No. 204 whistled for the station. Ben Buchanan the conductor, dropped off the hind end and strode into the office.

"Well, you've finally dug up some business, eh?" he grumbled. "'Bout time. Only thirty-one cars in this drag tonight." He glanced at the way-bill and then raised his eyes quickly to the operator's face. "Say, what the hell is this? A joke?"

"No," replied Mallory, soberly.

"It's a hog, and a darned important one, too, if you ask me."

"Well, I didn't," snorted Buchanan as he turned on his heel.

Bud finished writing out a stockman's ticket and a freight train permit, and then closed the office. There were two or three clankings as the crew spotted the car ahead of the caboose. Finally there was a high-ball from Buchanan, and the train was on its way.

As the caboose passed the station, Bud swung up the steps and went into the car.

"Buck," he announced to the conductor. "It may seem funny to you, but this shipment is mighty important to the K. S. C. It may mean opening up a line of business. Mind if I ride with you? I'll catch No. 3 back."

Buchanan's voice was quizzical, but he asked no direct question. His reply was cheery.

"Sure thing, Bud. Help yourself."

IT must have been long after midnight when Bud Mallory, asleep on the long seat cushion of the caboose, was awakened by the sudden application of the air. He looked around and saw that he was alone. Climbing down to the right-of-way, he started up ahead to investigate.

As he passed the car that carried Wiggins' Pride, Harvey stuck his head through the door. "What's the matter?" he demanded sleepily.

"Don't know yet," replied the operator. "I'm going up ahead to find out."

Twelve or fifteen car lengths forward he met the swing brakeman.

"What's up?" the operator questioned. "On the ties?"

"Naw," responded the shack. "We're stuck. Washout. Rocky River bridge is gone. So's the approach on both sides. The river is two miles wide. We'll be here a week."

Mallory groaned. "When did it go out?"

"Right after No. 6 went through. Lucky it held up under them."

The operator agreed. He was thankful nothing had happened while the passenger train was crossing, but his brain was in a turmoil as to the outcome of his own mixup in the Wiggins shipment.

He walked back to the hind end and met Harvey.

"What's the trouble?" demanded the Wiggins employee.

"Stuck," responded Mallory. "Washout."

"Hell! Old man Wiggins will be wild."

But that was a conclusion Mallory had already reached on his own account. He climbed back into the caboose and sat down in front of the conductor's desk. There were several pigeon-holes above, and in one of them was a bunch of waybills with the Wiggins shipment on top. Mallory looked at them. As far as he could judge, that waybill was going to be his resignation.

He turned it idly. The next waybill beneath covered a shipment of two outboard racing shells, with motors attached, billed in care of the Missouri Outboard Racing Association, Kansas City. Mallory remembered reading about the coming regatta.

Suddenly he jumped to his feet, dashed out of the car, and called to Harvey.

"Hey! There's a ring in that hog's nose. Will he lead?"

"Sure he'll lead. He's as big a pet as Wiggins' hound dog."

"All right. Get a plank and get him on the ground. We're going to

give him a boat ride to Kansas City. It's only forty miles, and we can make it by daylight."

"You're crazy! If anything happens to this hog Wiggins will skin us alive."

"Yeah! And if that hog doesn't get to K. C. tomorrow morning, Wiggins will lose a bunch of blue ribbons, I'll lose my job, and you won't be in such a swell spot yourself."

BUD MALLORY had already decided he was in over his head as it was, and there was no use backing up. Without the slightest compunction he broke the seal on the car containing the racing boats, and with Harvey's help carried one of the contrivances to the water's edge, fifty yards away. Then they went back and got one of the motors.

Mallory knew the tanks had been drained and he headed for the station. Judicious inquiry located a five gallon can of gas. As he left the station Mallory handed the night operator a message.

"Send that to DS when you get time, will you?" was his request, sticking the message on the sending spike, face down.

It was ten minutes before the op cleared DS and reached for his own stuff as he flipped open the switch of the Vibroplex.

He read Mallory's message and then called Conductor Buchanan.

ESC—DS.
Taking personal charge Wiggins shipment. Transferring from rail to water.
Mallory

As Buchanan read the message there was a series of staccato barks that quickly warmed into a steady roar. The skies had cleared and the moon shed a silvery glow over the surface of the turgid waters.

"Sounds like a speed boat," said Buchanan.

"It *is* a speed boat," cried the astounded agent. "There it goes! Lord, man, those two fellows have got a *hog* in that boat!"

Ten miles from Kansas City the outboard motor was still functioning perfectly. A long, rosy line tingeing the eastern horizon heralded the approaching dawn.

Huddled low in the stern, Mallory held the boat on its course. In the center of the boat the big Berkshire porker moved restlessly on the pile of sacks the men had thrown into the speedster at the time of embarking. Harvey was trying to keep the animal quiet, but so far as the porker was concerned, the coming of dawn meant food and he was becoming anxious.

"I've done some crazy things in my time," shouted Harvey, glancing back at the man at the tiller, "but this is the wildest yet."

He shook his head doubtfully.

"It may be crazy," the op admitted, raising his voice, "but the railroad agreed to deliver this hog and I'm going to do it if I can."

"I wish you'd sell the hog on that idea," grumbled Harvey, patting Wiggins' Pride and rubbing him back of the ears. "This baby weighs more than you and me and the boat put together, and if he takes a notion to start moving around—good night!"

SUDDENLY, interrupting their conversation, there was a gurgling sound from the outboard motor, a couple of asthmatic coughs, and silence.

"Out of gas?" queried Harvey, anxiously.

"The tank's empty, but there's still a quart left in the can," replied the operator, reaching for the five-gallon

container from which he had filled the tank three times during the night.

From somewhere in the morning haze along the river came the sound of a crowing rooster. That sound meant morning. Morning to the big hog meant one thing—breakfast. Wiggins' Pride raised himself on his stubby forelegs.

Harvey hastily shifted the sacks.

"There's nothin' but a quarter-inch of planking between four hundred pounds of hog and thirty feet of water," he said, anxiously, as he slid the burlap beneath the sharp hoofs of the porker. "If he sticks one of those feet through this cockle-shell it's the end."

"That's your job," retorted Mallory. "I've got my own troubles with this motor."

He spun the fly-wheel hopefully, but nothing happened. The second time the motor fired. The boat was fifty yards off shore.

Then a dog barked and a man's voice called, "Sook! Sook! Soo-ey!"

If the sound of the rooster had been disturbing to the big Berkshire, the time-honored call of a hog's breakfast was something not to be denied. As the motor surged into a roar and the tiny boat swung into her stride again, Wiggins' Pride lurched sideways in the direction from whence had come the sound.

Quick as was the hand of Harvey in shifting the burlaps, the cloven hoofs of the hog were quicker.

Crack! With a gurgling sound the muddy water gushed through the hole in the racing boat.

"Now you've done it!"

"What d'yuh mean, I've done it?" snapped Harvey. "Did you ever try wrastlin' a four hundred pound pig in a canoe? What'll I do?"

"Stick a sack in the hole and hold it there," cried the operator.

Harvey flipped one of the burlaps over the hole and pressed it down with one hand, trying to quiet the hog with the other.

Then, Wiggins' Pride, with that animal perversity that is entirely beyond all human comprehension, calmly proceeded to repair the damage he had done by simply sitting down again—fortunately over the hole caused by his sharp foot. The wet gunny-sack, held in place by the fat ham of a 400-pound hog, was sufficient to stop the leak. No more water gushed into the boat.

Mallory swallowed hard.

"We're safe as long as he doesn't move," he cried.

"If you know any pig-Latin prayers, start sayin' 'em," retorted Harvey. "If he moves we're sunk."

"Watch the hog and keep your eye out ahead," barked Mallory.

As the custodian of the hog turned his glance forward, he let out a yell:

"Hey! Look out! A log!"

But the warning was too late. With a loud tear, the thin planking of the speed-boat crashed into a half submerged timber, and slowly began to sink.

Wiggins' Pride felt the water creeping up around his haunches, looked rather quizzically at the two men and with no more ado, started for the shore.

"Can you swim?" yelled Mallory, as the boat sank lower and lower.

"No," gurgled Harvey.

"The hog can. Let go his head and grab his tail."

Grasping what he could of a three-inch, screw-like tail, Harvey was dragged shoreward. With an easy stroke, Mallory followed more leisurely.

BY the time the operator reached the bank, Wiggins' Pride had regained his composure and Harvey had completely lost his.

"Maybe you can explain *this* to old man Wiggins," chattered the dripping custodian of the big hog. "Then maybe again you can't. As for me, I'm quittin'. I didn't contract to go swimmin' on this trip."

"Quit squawking," answered Mallory, tersely. "We're twenty miles from Kansas City."

"You mean you think you're gonna get there?"

"Sure we are."

"Well, count me out."

"Not much. You're part of the shipment. Old man Wiggins paid for a stockman's ticket on you. Let's find the road. There must be one near here."

There was, but it was deserted.

"We can't walk this hog into Kansas City," protested Harvey. "He wouldn't weigh fifty pounds when he got there."

"We're not going to," replied Mallory.

From down the road came the honk of a motor horn. Mallory led the hog into the center of the road.

"What you goin' to do?" queried Harvey.

"Probably a truck. We'll stop 'em."

But it wasn't a truck. It was a limousine, and it contained two men and two girls returning from an all-night session in a local speakeasy.

"Hey, whazza idea?" demanded a young man in evening clothes, apparently the leader of the expedition.

Mallory thought fast. If he could appeal to the youth properly, he might win his point.

"We've been on a party," he chimed. "We're all wet!"

"H'ray!" was the prompt response. "So're we! Where'd you get the pretty piggy?"

"This is the little pig that went to market," replied Mallory, wondering just how far he could carry the affair.

"Good! Nice piggy. We'll go market, too. Move over, fellers—got company."

"Hey, Mallory, you can't do that," protested Harvey.

"Shut up," whispered the operator under his breath. "I'm going to deliver this hog one way or another. Get him in the car."

If Wiggins' Pride was at all objectionable to them, his companions were in too much of an alcoholic daze to interpret the grunts of the hog.

AT 8.30 A.M. Eph Wiggins received a call from his hotel clerk.

"I beg your pardon, Mr. Wiggins, but there's a big car down here with five people and a hog. I think they're, er, just a little intoxicated. They say it's your hog."

Eph snorted.

"Young man, drinkin' ain't no part of a hotel clerk's job. Besides, I never saw a drunken hog—with four legs, leastwise." Wiggins hung up the phone with a bang and looked out the window.

"Jumpin' Jehoshaphat! My prize Berkshire! What's them thieves up to? Just what I could expect from that K. S. C. outfit, anyway."

Wiggins started for the curb. As he elbowed his way through the laughing crowd that had collected, a bellboy handed him a message.

"It's for Mr. Mallory, in your care," was the explanation.

"Sorry we had to bring this shipment through in bad order, Mr. Wiggins," was Mallory's greeting, as the

irate farmer elbowed his way to the car.

"The hog's in better shape than any of ye," was the irrascible retort.

His comment was probably true. Of the occupants of the car the hog seemed the least bedraggled.

Anticipating the storm that was gathering, Mallory hastily recounted the night's adventure. The operator was a mess. He was weary, his coat was gone and the sleeve of his shirt was stained with blood.

Convinced of the safety of his prize hog, Wiggins' grim visage relaxed slightly. He seemed suddenly to remember the telegram.

"This is for you, young feller," he

"Well, that's that," he announced.

The op read it and handed it back to Wiggins.

"Well, that's that," he announced, resignedly.

It was from the superintendent of the K. S. C.

Effective this date you are discharged for unauthorized use of equipment, breaking and entering and destruction of freight in transit.

Wiggins snorted.

"That hog's wuth three of them durned gasoline contraptions," he palpitated. "I'll pay the damages. It's wuth it to get him here. Them durn fools don't appreciate nothin'. They'll never get *another* shipment from me."

Bud looked up wearily.

"Now you listen to me, young feller," sputtered the old man. "I like your spunk. Jerry Martin is gettin' married to my daughter next month and he's goin' to run the elevator. That leaves the station agent's job open. If I've got anything to say with the G. W. N., you get that job. What ye say?"

"Well," responded Mallory, a smile spreading over his mud-caked and tired features, "I guess that's fine with me."

And from the porcine depths of Wiggins' Pride came a series of grunts which might well have been interpreted:

"Me, too!"

Sunny Side of the Track

A HIGHBALL ARTIST

I KNEW a man named Nick Carter who was a highball artist on an engine, but was (and still is) afraid of automobiles. He usually rode from the yards into Danville with a "car peck" friend, but the rule of the road prevailed. When they approached a stalled car, Nick said:

"Looks like that guy is tied up, and has got a flag out. Better answer him."

Traversing the main streets of the city, they came to a stop light.

"Green board," Lou sang out.

"Green she is," Nick repeated.

One night Nick sauntered into the police station with a traffic summons in his hands and announced: 'The dispatcher down there at Main and Walnut gave us a 31 order and called us up for investigation. Where's the super?"—P. J. Kelly, Vice Gen'l Chairman, Big 4, Brotherhood of Ry. & Steamship Clerks, etc.

SOME FAST RUNNING

THE exhausted young commuter stumbled down the aisle of an Erie Railroad car and fell on the cushioned seat, panting heavily. An elderly gentleman in the seat behind looked up and said:

"Young man, when I was your age I could run down the platform and jump aboard a train without over-exerting myself."

"But," came the unexpected reply, "I missed this train—at the last station."

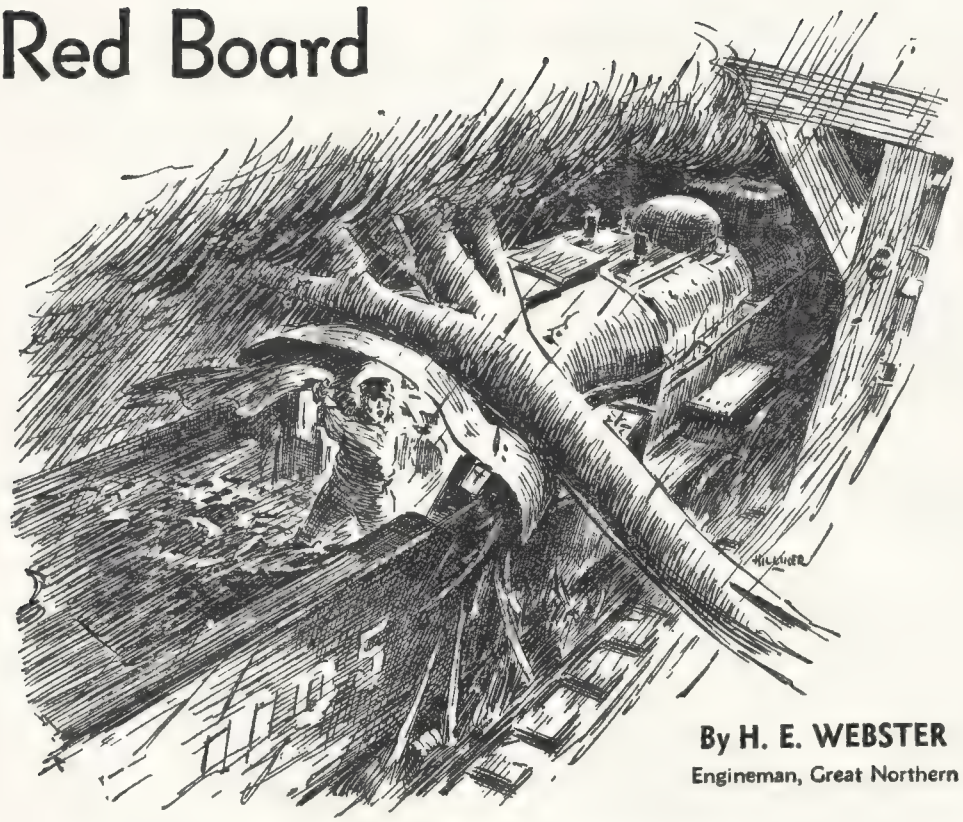
* * *

HE PLAYED SAFE

TRAFFIC MANAGER: "Did you put 'Handle With Care' and 'This Side Up' on all the boxes to go by freight?"

Mike (the new shipping clerk): "Sure and Oi did, sor. An' for fear they would not see it on the top, Oi printed it on the bottom, too."

Red Board



By H. E. WEBSTER
Engineman, Great Northern

Uprooted by the Storm, a Great Tree Crashed into the Cab on a Record Run

WHEN Engineer Jack Callow signed the register in the roundhouse office the clerk silently handed him a letter. The heavy-set hoghead tore open the seal, took in the page of type at a glance, and folded it up again. He drew a deep breath, then turned to the call boy.

"Some of the boys," he said, "give you a dollar to pass 'em up when they don't want the midnight goat, don't they, Legs?"

"Why, sure, that's right," the call boy hesitated as he replied.

"Well, Legs, I'll give you a fiver every time you call me during the next year," Callow explained with a curious laugh. Then he finished up his business and strolled out of the office.

Mystified, the call boy scratched his head and watched him disappear around the bend of the house.

"What the hell did Callow mean?" he asked the clerk.

"He means what he said," the clerk replied solemnly. "Barclay suspended Callow for one year—he failed to stop for a red block."

Legs whistled. "How come?"

"The signal was green, but the right water glass busted and filled the cab with steam. Callow took a chance

and ran by the next signal, which had gone red in the meantime. The test man caught him. And old Discipline Barclay about blowed up. He took care of the case personally."

"Say, that hoghead's game!" ejaculated the call boy after a moment's reflection.

"You're right, he's game," repeated the clerk with feeling.

IT was a year later. The big passenger locomotive rolled slowly past the throng on the platform at Mountain Park. Vacationists in deluxe sport clothes rubbed elbows with ornately dressed dude ranchers, with genuine cowboys and blanketed Indians.

The buzz of conversation, the tinkle of laughter sounded in Callow's ears as he slowed the great machine for a smooth stop at the water tank. He was returning from his first trip after a year off. Near the tank, his glance was held, momentarily, by a group huddled about a baggage truck. He glanced back again when he dropped to the ground with his long oil can.

Baggage men were carrying a stretcher into the baggage car. A white-faced woman pleaded for care, then turned to a tall gray-haired man. "Tell the engineer to make it on time, John? Tell him he *must,* John. He *must,*" she cried hysterically.

"Now, now, mother," the man soothed. "We'll make it. Only got to make up an hour. The engineer can do it. Why — why, he can do that easy," he lied. He hurried away then. Hurried toward the engine where Callow was working with his long oil can.

"H-do-y-do, Mr. Barclay," Callow said shortly.

"Keep oiling, but listen," Mr. Barclay ordered. "Junior was seriously injured, up in the Park. Motor accident. Dr. Clemens cannot operate here; lacks proper instruments. He says that even minutes count. I know that you are not to blame for being late—you got the train late; but you must make Stanford on time."

Callow frowned.

"Must, eh? Make up an hour, eh? You—you come and ask me to do that after canning me for a year for accidentally getting by a block that your test man sprung in my face. Why—I'd have to make the maximum speed rule look like an old woman's dress parade.

"Hell, man! You get me wrong," Callow continued at a glance from Barclay's tortured eyes. "I know where it's safe to run, don't I? I wouldn't endanger the lives of that train load of passengers, even to save your son; but you go back and tell that little woman that we'll be in Stanford—*on time.*"

"He told you?" Conductor Peters asked.

"Yep, all ready," Callow climbed the high gangway.

"There's a ripsnorter raging over the hump," Peters called. "Wires are down west of Summit; but we got a clear track before it struck. Highball!" he snapped as the last baggage was hustled aboard.

There was a thunderous sequence of exhausts as the Limited shot into a near-by cut. Callow hurled the speed hound at curves; but steadied with a cunning touch of air brakes, the train took them with a silky glide. It thundered through cuts, roared across bridges, hurtled over tangents.

Choking exhausts filled snow sheds and tunnels with billows of smoke as Jack Callow smashed speed limits. Yet he smashed them with a nicety of judgment that let passengers continue com-

monplace conversation. He made Conductor Peters whistle softly.

A shrill wail sounded as brake shoes bit the spinning tires when Callow made the air test.

The exhaust was stilled as they plunged from a cut into the fury of the storm. Rain in sheets slapped the windows with drumming blows. It was impossible to face it. The engineer closed the sliding side windows.

With eyes riveted to speed gage and indicator, Callow shot the Limited down the mountain grade. Only by the swaying around curves could he tell his location.

That curve beyond snowshed 7 was a little low, he remembered. Sparks flew angrily from biting brake shoes.

FIREMAN SIMMS started to pull the canvas curtain across the gangway. He was struggling with the flapping sheet when it happened. A great, heavy mass crashed against the cab. It was a great tree, uprooted by the storm. Simms staggered back from the jingle of broken glass, the crackle of smashed wood, the shriek of torn steel. The screeching whistle sounded a continuous, unearthly wail. Steam roared from a broken pipe. Then the engine shot into the inky darkness of a snow shed. In the pandemonium of sound, through the live steam, Simms plunged for the dynamo valve.

"Broken wire," he thought, when no light came. The engine took a curve with a lurch, and Simms realized that the train was running away—plunging down the mountain grade with no hand at the controls.

He stumbled across the cab in the scalding steam, but dropped like a log when he ran into the full scorching jet. He started to crawl, then there came the roaring hiss of vented air. He felt the tremble of set brakes, felt the engine reduce speed. Then they shot from the snow shed.

On his knees on the deck, Callow was leaning against the mashed-in cab side. His gaze was centered on the speed indicator. He gripped a brake pipe and pulled himself to the twisted seat box.

"Shut the right injector throttle valve—the pipe's broken," Callow roared. Bill shut it, then leaped to the engineer. Callow swayed a little in the whipping wind blast. His right arm hung grotesquely. The falling tree that smashed in the cab had crushed his arm. Fortunately the tree had been brushed aside by the swiftly moving engine and by a seeming miracle and had not derailed any of the equipment.

Bill stumbled back to his seat box. He dug into his grip, to come up triumphant with a new bandanna. "I'll tie it up for you," he yelled.

"No time," Callow shouted back. "I kinda got it wedged 'tween me an' the cab. Don't dare let you monkey with it—my lights might go out—we got to keep this engine jumping toward Stanford to make it, Bill."

The locomotive roared over Swift Creek gorge, then plunged into Bad Rock canyon, with Callow's gaze focused on the wet rails ahead.

"Fifty miles now. Fifty miles, Bill, and a mite over forty-five minutes to make it. We'll do it!" Callow called triumphantly when Bill climbed down from the cab top. Then, as they crossed Deep Creek and shot from the last canyon into smiling sunshine, Bill yelled.

"Yellow, Jack," he shouted.

"Yellow," Callow repeated grimly. The warning signal. Precious time would be lost if he heeded it.

He thought of the frantic mother in the baggage car sitting by her stricken son. There was no rancor when he thought of Barclay.

"To hell with it," he roared. He reached for the throttle.

He would take a chance. He knew there was no train ahead, and that the next signal ought to be green. He guessed that one of Barclay's spotters had unwittingly tampered with the signal to test the engineer. Yet, supposing a defective rail or joint had sent it to caution? Or supposing a train *were* ahead?

If only he knew. In a flash Jack saw his year's suspension, saw dismissal staring him in the face. For an instant he hesitated, his hand on the brake valve.

But he took the chance, and he thundered around the curve. Eagerly he waited for the signal from the fireman. Then the tallowpot opened his mouth. Callow fearfully watched his lips form the words.

"Re— No, she's clear, Jack, she's clear!"

With a great sigh of relief his own eyes verified the statement as he snapped onto the tangent at seventy miles an hour. Callow drew out the throttle with his good left hand and the train leaped ahead. Now she was making better than seventy.

Thus the express ate up the miles to Stanford. At sixty miles an hour she thundered down the short tangent outside the yard limits. Then, slowing down to forty, she raced across the switches and crossovers and drew up in the Stanford station—not on time, but two minutes ahead of schedule.

THE next day a nurse softly opened the door of a room in Stanford hospital where Mary Callow sat by her husband's bedside. The engineer was worried.

"I ran that signal at more than a mile a minute, and they know it," he said.

"But, Jack, you had to run it. You *had* to, Jack," was the reply.

"Some one to see you," the nurse quietly announced. It was Barclay.

"I cannot tell you what I owe to you, Callow," Mr. Barclay was saying brokenly. "The operation was completely successful. And your arm. The surgeons say you will not lose it. That was a masterly run, Callow, to say nothing of the awful conditions. But about that signal. In view of the fact that there can be no doubt, you will not desire an investigation?"

There were ridges in Callow's pain-drawn face. He was amazed beyond belief. Mary's eyes were big and round.

"Investigation? Hell, no!" Callow finally said. "The surprise test man was on the spot. I knew the wart was springing a test. Why else would I run it? Would I endanger the lives of a trainload of people? Do a lot of good to jockey a train over the mountain at jack rabbit speed and then pile it up on the prairie. Sure I run the block, so give me the works. I'll take my year off—another year off. And you—you get to hell out of here!"

"Of course you would, Jack. Of course you would. You see, Jack, it's discipline. Discipline must be maintained. The road cannot make exceptions. This is your notice," Mr. Barclay said nervously. He laid an open letter on the white spread.

"I said get out! Don't Jack me!" Callow shouted.

Barclay glanced at Mary Callow. There was something imploring in his glance; then he hurried to the door.

Callow stared, stared after the general manager had passed beyond the portals. Slowly, as though in a daze, Mary read the short missive aloud. Callow had turned away with a curse.

For your failure to slow for a caution signal and for breaking all existing speed restrictions on the First District you are dismissed from the service of this company for the period of one year.

The G. P. Railway will make a special dispensation in your case, however. When you return to work, your record will show clear.

"Hell of a lot of satisfaction, that, after young Jim loses out on college," Callow blazed. "Discipline Barclay, the damn—"

He paused in astonishment. Mary was laughing wildly.

"Jack, Jack, look!" she said. "It's clipped to the letter. It's a check, Jack. It's—it's for two years' pay!"

How I Built a Wooden Locomotive Model

By WALTER A. LUCAS

Author of "How I Built a Steam-Driven Locomotive Model," etc.

THERE is no better pastime and challenge to skill for a young chap (and older one, too) than that of constructing models of rolling stock. When I was about twelve years old the urge to build a locomotive model impelled me to try my hand at this fascinating work.

Choosing a 4-4-0 type as the ideal for simplicity, I gathered up various pieces of wood and metal that could be used in its construction. This model was built to a scale of ¾" to 1 foot, and represented in a general way the latest design in use.

As there were no woodworking tools available, it was necessary for me to have the wheels turned up by a local shop whose proprietor obligingly made them to the proper dimensions from a sketch. The truck wheels for both engine and tender were of the single plate type. They required no further working than that of having the hole bored for the axle which was made of a ¼" dowel. The driving wheels were turned up blank and the spokes cut out with a scroll saw. Holes were first bored for the fillets at the hub and rim and the saw used to cut out the spaces between the spokes.

The driving wheels were 4 5/16" diameter and the truck wheels 2". The driving axles were ½" diameter. All the wheels were glued on and pinned with small wire nails. Lubrication was provided by rubbing the journals with flake graphite, which served the purpose very well.

All axle boxes were cut from blocks of maple flooring. The frame of the engine was cut out of a couple of spruce laths using the same method as on the driving wheels. The cylinders were made from large spools with smaller ones on top representing piston valves and fastened together with sheet

iron; they looked like the real thing.

Crossheads, guides and side rods were easily constructed from straight pieces, and the valve motion proved no barrier to a determined youngster. As the Walschaert gear was used it could be made of ample dimensions to prevent breaking when operated.

All the springs were cut out of pieces of spruce, as was the equalizer, while the hangers and straps were sheet iron strips. Brake cylinders were made of two spools, the various levers and shoes being of wood, closely imitating the real thing.

The boiler was turned up from a single piece of pine. Various appliances, domes and smokestack were shaped by the obliging wood turner who accepted only a few hard-earned pennies to cover the cost of the lumber.

The cab was made of sheet iron with thick celluloid windows. The imitation back boiler head fittings were realistically carved from wood, while the piping was of wire. A round block of wood was hollowed out to make the headlight, and a celluloid " glass " was installed. The base and vent were constructed to scale. The whole looked the same as the full-size lamp.

A tender was created with arch bar trucks and an underframe of a single board. The sides of the tank were composed of sheet iron tacked with small round head nails to a board representing the top of the tank.

On the whole, the finished job made a satisfactory showing. Even the small parts such as the couplers worked after a fashion. The entire engine and tender was completed, except for painting and lettering, in about two years.

Then came a minor tragedy. One day, when our family moved, the model as well as some household goods failed to arrive at their destination. While in transit, some person took those articles, and they were never recovered, much to the sorrow of the boy who had spent many a happy hour at his hobby and did not even have a photograph of his precious locomotive to show for his pains.

* * *

Comments from Readers

I have just finished building an engine house for my model electric railroad, the Red River Valley Central. The house is 3 ft. wide and 4 ft. long with a concrete flooring and has pits under all tracks. These pits make it look realistic, as they are made similar to the real type. The engine house is equipped with 3 tracks measuring 5 feet in length from the turntable. The turntable is made from a 90 degree mechanical cross-over track and works well. One track leads to the turntable and 3 come into it in a triangle shape.

I am now electrifying the engine house tracks and a 14 ft. branch over a lake. Overhead wire is used. A transformer is built near tracks to govern train speed. The engine is a 4-wheel Ives electric, made originally for center third rail. Cost of electric rails would have been too great, so I built the overhead wire at no cost but that of the mechanical track. The roadbed is gravel ballast.

I first became interested in model railroads in 1930, when your magazine started publishing model railroad news. My initial step was building wooden models. I made a locomotive from redwood and pine.

At first I did not care for electric, but since I have electrified my line I like the juice locos just as much as the steam.

My whole layout now has 41 pieces of straight trackage on main line and 7 curved—14 straight on branch line and 2 curved, 5 straight on spur and one curved, 15 straight on engine house track and one turntable. Have 4 switches on the main line. The entire layout is composed of over 100 feet of trackage. Visitors welcome, but please come before cold rainy weather sets in, as the road is hard to operate at that time. In fact, the rails are torn up during the winter.—E. H. Nervo, Box 66, Geyserville, Calif.

* * *

For the past year and a half, I have been working on a model of No. 5249 N. Y. C.

Hudson Type locomotive. I agree with H. B. Cline, of Quebec, regarding the creation of an International Model R. R. Club.

Regarding my model, I was fortunate in obtaining a set of blueprints from the builder and, being a draftsman, I made up a complete set of drawings of my own, at a scale of 9/16" to 1 ft. I found ⅝" scale rather large, and ½" scale a little small, so I decided on the 9/16" scale.

All figures, details, etc., were taken from the large 1½" scale builder's drawings, and are complete and accurate on my drawings. My model was then constructed from the drawings. It is built of wood, with some brackets, etc., of brass.

The boiler and firebox are made of many pieces of African mahogany, hollowed out for the sake of lightness. There are many parts made of black walnut, such as main frames and cradle, leading truck frame, trailing and tender truck frames, driver boxes or journals, springs, hangers, equalizers, straps, etc. There are a few parts of white pine.

The driving wheel rims, tires and flanges were made of 5 layers of maple veneer, glued together with the grain at different angles to each other, then turned out on my lathe. The hubs, crank pin bosses and counterweights and spokes are of walnut, all separate pieces. The complete wheel was then glued together on a jig or template.

The cab is mahogany. Front and back ⅛" thick, two sides and top are one piece of 1/28" mahogany veneer. The tender bed or frame is of mahogany; it contains 110 pieces so far, and is not finished yet. The axles and driving wheel crank pins are made of birch. The wheels of the leading truck, tender trucks and front wheel of trailer truck are made of 5 layers of maple veneer, while the rear wheel of trailer truck is made up similar to the driving wheels.

The frame work for the tender is built up of white pine, covered with 1/28" mahogany veneer. So far the model presents a most accurate and realistic appearance. All wheels are fully equalized with springs, straps, hangers, etc., just as on the real engine, only of course, the springs are made of walnut, but to exact size and shape.

Later on, I will take a series of photos showing the different parts of the model before assembling. Then the running gear all complete. Then with the boiler and tender tank mounted in place. Finally views of the complete engine and tender all finished and painted. It will measure 55⅜" over all.

As I have never had the chance to see a N. Y. C. loco, I would certainly thank anyone who would please write me just what are the colors the engines that pull the "20th Century Limited." Are they finished in regular standard black, with Russian iron jacket on the boiler?

Would be glad to get pictures and details of "The Royal Scot" locomotive and coaches.—H. C. Burgess, Kosciusko, Miss.

* * *

Am greatly interested in model railroading but can't seem to get started on my line, due to a shortage of track. Please print a request for offers of O gage track; straight track only; also switches. I am sure some fans have track they wish to get rid of. I could also use a transformer.—Luke Sinclair, 2423 15th Ave., San Francisco.

* * *

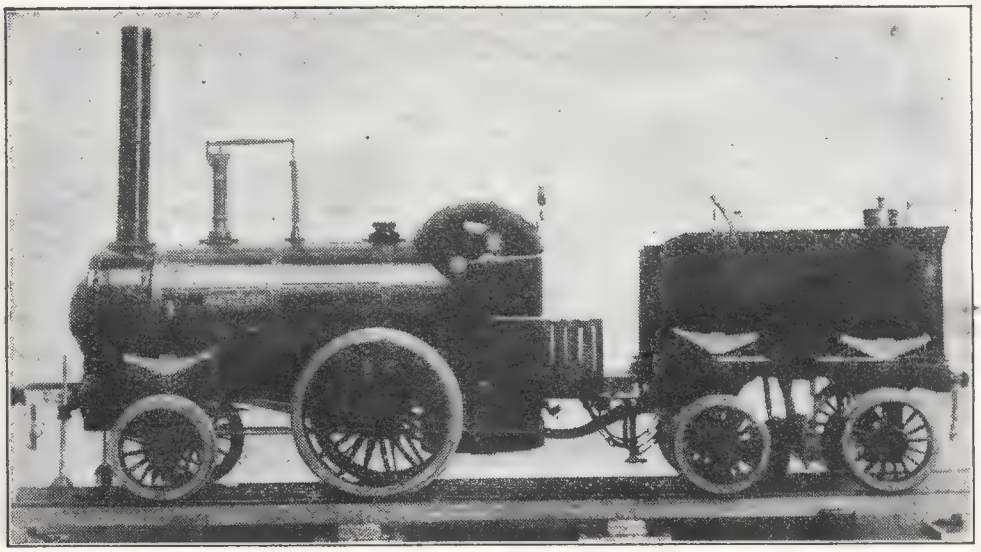
I am a model builder and have gotten some good hints from readers' letters. Have built models in 2 gages, O and OO, but prefer the latter. I intend to build an OO gage railroad. Wish some reader would write to me, so we could pool ideas. I have a "History of the Baldwin Locomotive Works"; "The Naval Annual" for 1913, 1914 and 1919; blueprint of a Baldwin 4-8-2 (Mountain) 2½ in. gage passenger hog; and several back issues of RAILROAD STORIES and "Railway Age" to trade for O or OO gage motor power or rolling stock.—Jack Baittinger, 4541 N. 12th St., Philadelphia, Pa.

* * *

My outfit consists of about 100 ft. of 2⅛ inch gage main line. Terminal at one end, with double platform and track system and switches. The other end has a loop of 5 ft. radius and also a spur. The rolling stock consists of 2 trolleys built to ½ in. scale. One is interurban type; the other, now in the process of construction, is a Connecticut Co. No. 1200. The feed wire is all overhead trolley construction. This line presents quite a picture at night with the cars illuminated and headlights shining down the right-of-way through my yard. It is not uncommon to have an audience of passing motorists. Fans, please write.—Elmer M. Norman, 10 Main St., Wethersfield, Conn.

* * *

As an ex-hogger, I am interested in model building and other railroad hobbies. My favorite magazines are RAILROAD STORIES and "Locomotive Engineers Journal." Have been collecting engine pictures since the age of 16, when I started firing on the little old Sandy River Line. At that time (1882) I had a scrapbook of railroad views, which I have since lost. I now have



Model of the "Meteor" Built by Warren W. Saunders, an Ex-Hogger of Portland, Maine

11 large scrapbooks. Would like to hear from any fan who has more seniority than I have in the engine picture game.

One of the locomotive models I built was pictured in your Feb., 1931, issue: "Pioneer No. 1," the first locomotive to turn a wheel in the State of Maine. It ran in Nov., 1836, on the Bangor & Piscatquis Canal & Railroad (now Bangor & Aroostook). I constructed the model from a photograph in my collection.

Another model I built is a replica of the "Meteor." The original locomotive was built by Robert Stephenson & Co. of England and imported in 1834 by the Boston & Worcester R. R. Co. (now New York Central Lines) and operated by them for many years. Before starting work on the model of this engine, I obtained information from the Railway & Locomotive Historical Society, Boston, Mass.

I followed a drawing found in an old B. & W. record book and scaled the model by the eye from this picture. First I made the boiler of hard wood, lagged with alternate strips of alternate dark and light wood. Wheels, domes, stack, frame and all other parts were scaled by eye to the boiler. All levers were cold-forged from steel nails. Wheel rims were turned on a lathe, centered on a piece of wood with a hub, fitted with spokes and held with pins at the rim. The valve motion consisted of 2 floating eccentrics operated by 2 pedals on a footboard and 2 hand rods on the side of the boiler.

The engine and tender I made from hard and soft wood, steel and brass, with the best paint and varnish I could get. The boiler was painted a natural wood color, the wheel centers red and rims silver, and frames green.—Warren W. Saunders, 497 Washington Ave., Portland, Me.

Three of Next Month's Headliners

"Rattlesnake Mountain"—E. S. DELLINGER

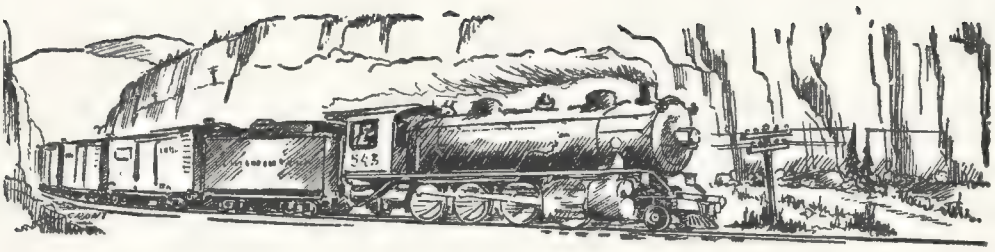
King Lawson Runs into Plenty of Danger in the Canadian Rockies

"Civil War"—A. LESLIE

A Thrilling Railroad Novelette Based on Little Known Historical Facts

"America's First Big Train Robbery"—EARLE DAVIS

DECEMBER ISSUE OUT NOVEMBER FIRST



Locomotives of the Rutland Railroad

Class	Type	Numbers	Cylinder Dimensions (Inches)	Driver Diameters (Inches)	Boiler Pressure (Pounds)	Tractive Force (Pounds)	Builder, Date
			Passenger Engines				
C-2	4-4-0	65	19 x 26	69	190	21,970	Brooks, 1897
C-1b	4-4-0	88	18 x 24	69	190	18,200	Schenectady, 1899
C	4-4-0	99	14 x 22	63	190	11,050	Schenectady, 1896
F-12	4-6-0	44 & 47	20 x 26	69	200	25,620	Alco, 1902
F-12a	4-6-0	40, 42, 43	20 x 26	69	200	25,620	
F-12ax	4-6-0	48, 49	20 x 26	69	200	25,620	
F-11a	4-6-0	50-54	21 x 26	63	200	30,940	Alco, 1902
F-11ac	4-6-0	55-57	21½x 26	63	200	32,430	
F-13	4-6-0	63, 64	20 x 28	61	200	31,210	Schenectady, 1898
F-2j	4-6-0	74-79	22½x 26	69	200	32,430	Alco, 1912, 1910
F-2k	4-6-0	70-73					
K-1	4-6-2	80-82	25 x 28	69	200	43,100	Alco, 1925
K-2	4-6-2	83-85	25 x 28	73	215	43,800	Alco, 1929
			Freight Engines				
E-1d	2-6-0	144-145	20 x 28	57	190	31,730	Schenectady, 1900
E-14	2-6-0	146-150	19 x 26	57	180	25,190	Schenectady, 1898-1900
G-14	2-8-0	10-12	19 x 28	54	200	31,820	Schenectady, 1897
G-34a, b, c, d	2-8-0	15-31	22½x 30	63	195	39,960	Alco, 1907, 1910, 1911, 1913
H-6	2-8-2	32-37	26 x 30	63	200	54,720	Alco, 1918
H-6a							
			Switch Engines				
B-2a	0-6-0	100-101	19 x 26	54	180	28,160	Alco, 1907
B-9	0-6-0	102-104	18 x 24	51	180	23,330	Alco, 1902
B-2b	0-6-0	105	19 x 26	54	180	28,160	Alco, 1913
B-2c	0-6-0	106	20 x 26	54	180	31,200	Alco, 1914
U-3	0-8-0	109-110	25 x 28	51	175	51,040	Alco, 1918

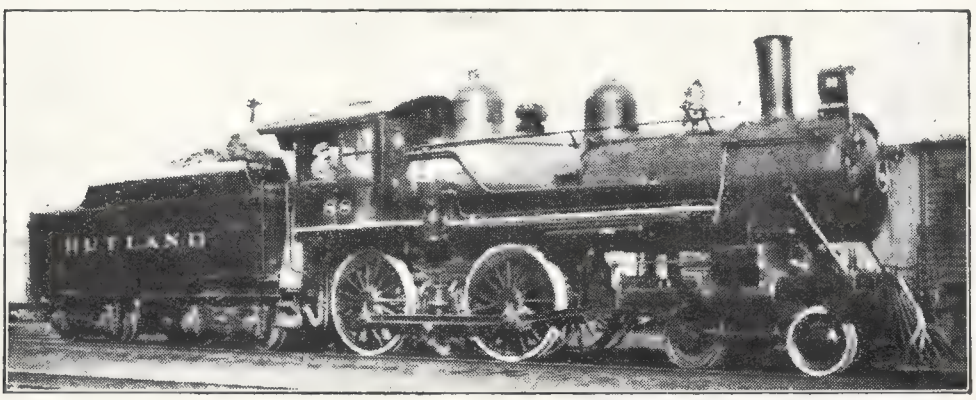
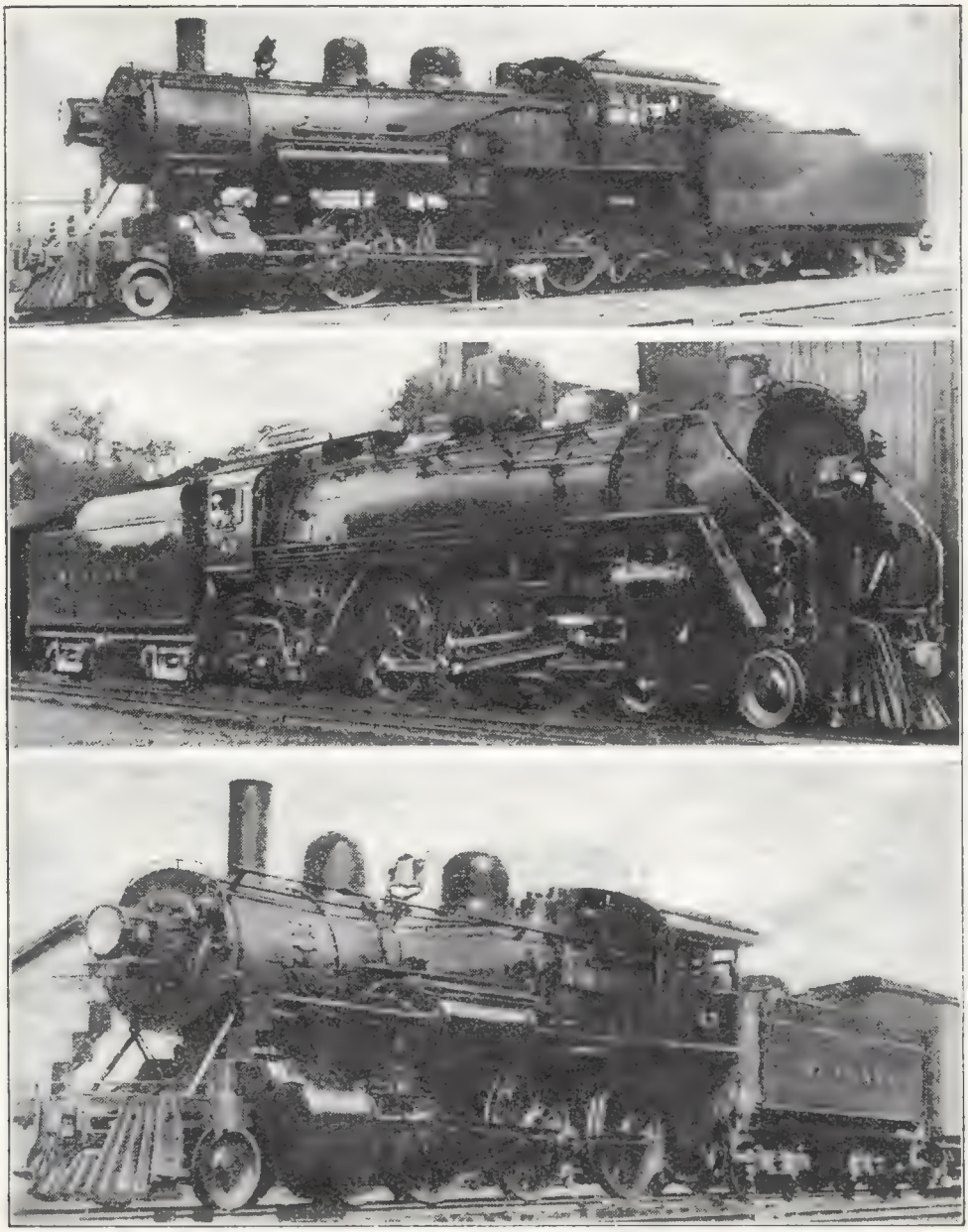


Photo by R. Costello, Rutland, Vt.



Photos from Railroad Photographs, 5 Appian Way, Allston, Mass.

Rutland Engines Nos. 51, 83, 45. Although No. 45 Is No Longer in Service, It Was Class F-12a, and Had Same Specifications as Nos. 40, 42, 43

FOLLOWERS of our monthly locomotive features will be interested in Bulletin No. 31 of the Railway & Locomotive Historical Society. In this issue are articles on the locomotives of the Boston & Maine, early engines in Nova Scotia, the Chicago & Grand Trunk, a complete history and roster of Minneapolis & St. Louis power, and other shorter items. Copies can be procured from the Railway & Locomotive Historical Society, Inc., Baker Library, Harvard Business School, Boston, Mass., for $2 each.

NEXT MONTH: MONONGAHELA RY.

On the Spot

MY story, "Diamond Stacks," is based on actual facts. When I hired out as fireman in Helper, Utah, in 1917, my eyes were shot. I hired a boomer to take exam for me and he passed so I went to work. You can probably appreciate the mess I was up against when I tried to catch a signal a hundred cars away. In fact, that is why I finally quit, because I didn't have brains enough to get some glasses. I got them after returning to train service on the narrow-gage.

And Doc McIntosh, railroad doc, did exactly what the company doc did at end of my story. He let me memorize the bottom line of the eye chart and I got away with it.

My dad ran a narrow-gage helper engine over Cerro Hill, 4 per cent grade, and through the Black Canyon—scenic attraction of the D. & R. G. for 15 years—until the Royal Gorge superceded it. I grew up in Cimarron, helper town, and had intimate contact with the narrow-gage boys all through that time. I saw straight air in operation. They had link and pin couplings until about 1906. Then they changed over to automatic air and automatic couplings.

There were 10-ton box and coal cars with dead wood on the ends, swing brakemen who worked over Cerro Hill, and plenty of real "color," such as draping the engines with black crêpe whenever one of the firemen or engineers were killed. There was the railroad eating-house with hashers coming and going. The boys met each train to "look the new hashers over with an eye to matrimony." There were rock slides, cloudbursts, slipping mountains and all the rest of those "acts of God" common to these Colorado mountains. "Big Hat" was a real character my dad knew.

That "Colorado Midland" yarn (Sept. issue) is plumb good. I know every spot in it. I worked on joint track on the D. & R. G. and Midland between Newcastle and Grand Junction. We used to race Midland trains to Newcastle and had some thrills. That was in 1917. I was firing on the Rio Grande Western and caught occasional trips up the second division to Minturn.—G. A. LATHROP, Gunnison, Colo.

* * *

A Letter from Dellinger

Have recently spent some time in Western Canada gathering material for a new series of *King Lawson* novelettes. There is very little difference between U. S. and Canadian railroading. The men belong to the same B. R. T., railroad by the same rules, use the same signal forms, and the same order forms. I noted a slight difference in the actual giving of the "go ahead" signal, and observed that they use whistle signals only in starting passenger trains. Also noted a trifle more tendency toward safety rules. Otherwise the trains might have been running over the track in the States.

Many men with whom I talked had been born in the States, some across the water, some Dominion-born. A lot of them had at one time either been American boomers gone north, or Canadian boomers who had worked in the States.

A large number of "rails" do not like to read gangster stuff, so I will lay off it awhile, beginning with the second novelette.—E. S. DELLINGER, 344 N. Amherst St., Albuquerque, N. M.

* * *

Fooling the Call Boy

Twenty-five years ago, when I was firing for the S. P., I had a double named "Slim" Smith. The call boy could never tell us apart, especially at night. When he called either of us at Blue Canyon, where they only had oil lamps, the boy had to hold his lantern close to our faces. Usually he would wake the wrong one. You can imagine how mad a hot-headed fellow gets when you wake him up around 2 A.M. in a nice warm bed and 10 feet of snow around the old house. After a 14 or 15 hour run, you were pretty tired and were sound asleep in a short time.

Smith had a terrible temper. The call boy would arouse him and say, "Sign here, Robinson; you're called for R.S.X west," or some other train. I would be expecting a call, so I'd be awake and hear the fight.

"Leave me alone!" Smith would holler. "I'm not Robinson." Sometimes the call boy would get us right, but I would tell him, "Robinson is across the room," and then see the rumpus. Sometimes there would be 10 or 12 men in a big room and all would holler, "Shut up!"

But it was a grand feeling on a cold snowy day when the call boy would wake me up for Smith. I'd laugh myself back to sleep.

In 1910 I was called for work on an extra. I knew I'd be gone a few weeks, so I tried to trade with somebody, but no one cared for that job. It paid only 25¢ an hour, while the other jobs paid from 37¢ to 50¢. I was broke, so if I didn't go I'd have to quit. There was no excuse. No one wanted to go on a work train. I took along 24 boxes of lunch, cigars, chewing tobacco. I even got a haircut so I would not have to buy a comb and brush. By the time I ate half the lunches, the hoghead took pity on me and loaned me enough money to buy meals. I slept in the caboose.—J. J. ROBINSON, 480 Haight St., San Francisco.

* * *

A Sad Dav for the W., W. & F.

On June 15, 1933, the morning train from Albion, on the Wiscasset, Waterville & Farmington

Lower Photo by Linwood W. Moody, Union, Me.

Two Wrecks in Maine. (Upper) A Lone Engine and a Freight Train on the Maine Central Crashed Head-on at Cornish a Few Weeks Ago, Derailing Both Locomotives and Smashing Several Cars. One Man Was Killed; Two Were Hurt. (Lower) Freight Train Derailed on the W., W. & F., near Whitefield Station

n Maine, broke a rail one mile south of White-ield station, 14 miles above Wiscasset. The fire-nan jumped, but the engineer stayed and was quite shaken up. Thereupon the road ceased operations. It may resume and it may not, but so far the wreck hasn't been touched—except that everything detachable has been stolen, even the whistle! The engine is No. 8, bought from the defunct Kennebec Central Railroad last winter. This was her second trip on the W., W. & F.

She was formerly K. C. No. 3, and prior to that was Brighton & Saco River No. 3. She was built by the Portland Co. in 1892 for the B. & S. R. She weighs 18 tons and has vacuum brakes. —LINWOOD W. MOODY, Union, Me.

* * *

Where Jesse James Roved

The old Hannibal & St. Joseph Railroad—now part of the Chicago, Burlington & Quincy System—dates back to 1846, when the first public meeting to consider the building of such a road was held at Hannibal, Mo., in the law office of John M. Clemens. Mr. Clemens was justice of the peace and father of the famous Mark Twain. Actual construction was started Nov. 3, 1851, after the state had granted aid of $1,500,000. A few months later a federal grant of over 600,000 acres was provided. In June, 1857, the road had reached Hunnewell, only 37 miles from Hannibal. On Feb. 13, 1859, at a point just east of Chillicothe, the road was completed with the driving of a golden spike.

The Hannibal & St. Joe has played a prominent part in developing the Nation. Over it was carried the mails that were also transported by the overland stages and the pony express. Over its rails passed the first railway mail cars in the world. In the Civil War, the railroad personnel provided great support to the Union cause in northern Missouri. Shortly afterward this section was the center of operations for Jesse James and his gang of outlaws. All in all, the H. & St. J. has had a colorful history.—L. L. FEIHERT, 412 Riverside St., Hannibal, Mo.

* * *

Train Has 8 Engines!

Coal business on the Western Maryland Ry. has so increased that extra engines are being used to take the trains over the 4 per cent grade between Hendricks and Thomas.

Eight engines were used recently to move a train of 70 loads over the Black Fork grade. Usually a train is made up of 40 loads to negotiate this grade. Eight engines were the largest number used in connection with one train in the history of the road.

After ascending the grade, the trains are assembled and one engine takes 150 loads to Cumberland.—WM. T. NEWMAN, Keymar, Md.

* * *

Riding "The Silk Express"

Have just seen "The Silk Express" movie. It is quite evident that all the scenes were made on the "Big N," although no numerals or initials are to be seen. The hick sheriff gets all hot and bothered because the train bunch won't announce a murder until the train gets to Havre, Mont. According to the film, this is because there is no capital punishment in the State of Montana. Of course the law may have been changed in recent years, but my dad witnessed several legal hangings in Montana.

The millionaire who hired the "Silk Express" seems to know more about the movements of the train than does the conductor. The hogger gives the correct signal in blowing out his flag, but it weakens the picture when it is known that there are no flagmen or brakemen on the train. Their places are simulated or taken by railroad dicks. That's a gross insult to any railroad man.

Although I have never seen a silk fire, I have been present at several cotton fires, which—outside of oil wells—are the hardest fires in the world to put out. Silk fires are said to be almost as hard to extinguish, and yet they put out the flames in the "Silk Express" with a mere fire extinguisher, after it had gotten quite a start!

After one of the too numerous stops, Conductor Clark gives about as sickly a highball as one would (not) want to look at. In fact, it is not a highball at all, but an easy "come back" signal such as you give the eagle-eye when you are making a coupling and desire his presence back a few inches.—"WOODY," Los Angeles.

* * *

42 Years Ago on the New Haven

I am writing this letter in the woods, one mile from the birthplace of Frank A. Munsey, the telegraph operator who founded RAILROAD STORIES back in 1906. It was called RAILROAD MAN'S MAGAZINE then. A copy of the latest issue was forwarded to me by a recently retired "op" and agent on the New Haven System. At the same time he sent me from his train order files copies of train orders I had sent to him 41 and 42 years ago, with my private dispatcher's sign on them!

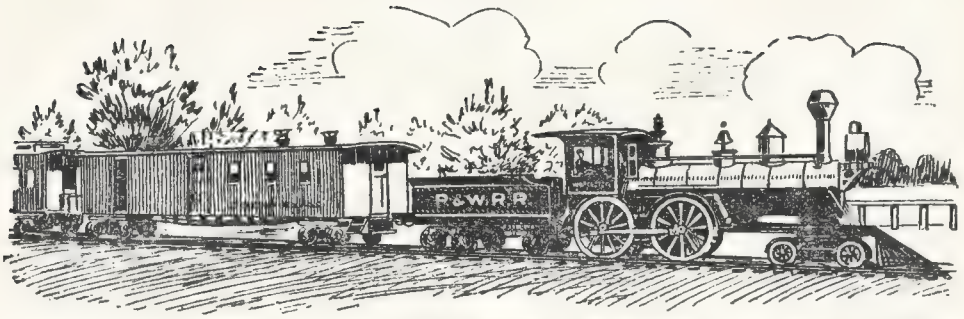
I was chief at that time. I believe I was the first night salaried train dispatcher in the early '80's. N. E. Smith was telegraphic superintendent. We had "some" railroading in those days, especially during the fruit rushes. It brought a lump to my throat the other day to see my train orders kept in memory by one of the most efficient boys I know, D. W. Peckham, of Middlefield, Conn.

Though I was not a licensed engineer, I could pull a throttle with the best of them. That same boy has my special conductor's lantern. In extra busy times it would be dangerous to put on green conductors to run extras, as a little misunderstanding might cause a bad pile-up.

At night, after my day's work, I would get a safe tail end man and a green middle man and take out the perishable fruit. I would grab a passenger day engineer and ride the engine. He would sit on his box when we got out on the line, while I took the throttle, so he could sleep and be fresh for the day's run.

I also went out some nights to bring in new locomotives, because the new engines ran hot and it required skill not to delay the perishable trains. I had to direct the dispatcher on duty so as not to confuse him, as we would often have to lay on sidetracks to repack and cool a hot box. It is easy to weaken a journal by overheating.

I was born a railway man. My father and his



Courtesy of The Providence (R. I.) Sunday Journal

Old-Time Train on the Providence & Worcester Railroad, Now Part of the New Haven System

brother turned the first railway wheels from Danville Jct. to Waterville, Maine, in the latter '50's. My father as engineer ran the first mixed trains out of Bath, Maine, where I was born in the early '60's. Before I was 4 years old he ran the first train out of Skowhegan, Maine. Later on account of physical disability, he became a station agent.

I taught myself telegraphy, being one of the first to learn it by ear. Nearly everyone used register and tape in those days, when hopper stacks, wood fuel, hand brakes and turtleneck drawbars were in service. At the age of 15 I left home to go to work as operator, agent and coal manager for engines at Sandy Hook, Conn.

One day the wire went dead. I grounded and kept westbound trains moving by a system of my own. There was a great powwow about it. Charles P. Clark, president of the New Haven System, had conductors and engineers send my orders in to him. He wrote me that I was to be discharged. He had seen me several times and had called me "kid," but was too wise to ask my age. He sent me a pass and told me to go to Willimantic Jct. and ask for a letter. It proved to be orders to go to Turnerville and watch things for a few months, with the view of taking up train dispatching. Later I was called in to be the first salaried night single-track dispatcher.

As the jerkwater lines had older men, they lowered me and put in a "pet." On his second or third night he spilled the beans. Some of the old engineers saw the mistake before things happened. They were sure that a fruit train and an empty would meet on a 138-foot high viaduct. Then I was called back, and the "pet" dispatcher vanished. The telegraphic superintendent was so unnerved that he could not sit down to the key.

The two trains met on solid ground; both engines were badly smashed. Fruit and empty cars blended, the crew jumped and one conductor went over the top of the cars. He was in the middle of the fruit train when it buckled. We found him afterwards, mixed with berries.

From then on, I was unofficially recognized as chief. In about a year a man came in and asked loudly, "Where is the kid that stole this railroad?" Even I did not know what he meant. He went in and saw President Clark and they soon returned together. The man proved to be President Goodnough of the C. M. & St. P. He sat with me all day and offered me $4,000 a year as a starter if I would go with him. My reply was: "Keep it mum, but I'm going to quit railroading soon." I did not know they had absorbed my order method and called it "Standard Code." It had no loophole for an accident.

I quit railroading, not because of dislike for it, but because of my desire to enter the medical profession. I am now a specialist for nerves, ear and cancer.—Dr. Clarence G. Penney, Litchfield, Me.

* * *

From "Soda Ash Johnny"

I was glad to get Stookie Allen's original drawing of me which appeared in your "Famous Engineers" series (July issue). You have been rather generous in rating my record as outstanding. It has been my good fortune to enjoy perfect health and steady employment throughout a longer period than do most people, and in that respect I am willing to accept the compliment. The pictures bring back fond memories.—John M. Horan ("Soda Ash Johnny"), Milwaukee, Wis.

* * *

An Unusual Experience

Recently, I traveled to New York on the Jersey Central, behind a Pacific 4-6-2 type, No. 814, with 73-inch drivers. At Elizabeth the B. & O. "Capitol Limited" passed us, beating us to the station. The B. & O. used the "President Tyler," a Pacific 4-6-2 type with 79-inch drivers. When the "Capitol Limited" left, we pulled up to the station. So did a Reading Pacific type; I couldn't help noticing the giant 80-inch wheels. She is a speed demon, all right.

Above the tracks of the railroad runs a bridge, with the P. R. R. main line over it. At the moment, I looked up to see the Pennsy's "Limited No. 5" flying through town towed by an electric. I wonder how many other readers have seen 4 or more locomotives from different pikes at the same time?—D. M. Sacks, 915 West 6th St., Plainfield, N. J.

Old Branch Line Abandoned

The whistle of trains on the Point Reyes branch of the Northwestern Pacific sounded for the last time July 31, 1933, when the historic branch was abandoned. Shippers of the Point Reyes section fought the discontinuance of train service on the grounds that trucks were not satisfactory on long hauls. A motortruck concern was granted a franchise, however, for the freighting of merchandise 19 miles between Manor and Point Reyes.

The first railroad service given on the Sausalito-Cazadero run was by the old North Coast Railroad, January 11, 1875. With the coming of automobiles, busses and trucks, the northern section of the 50-mile line was dealt a heavy blow.

Local residents turned out *en masse* to see the last train leave the depot. It steamed slowly away down through the canyon with bells clanging and whistle blowing, amid the cheers of the crowd. Many eyes were brimmed with tears.

The narrow-gage road at its prime owned 27 locomotives. When it was abandoned it had only 6, all 4-4-0 types. It also had over 100 freight and passenger cars. Most of the equipment is stored at Point Reyes. Fans wishing to obtain pictures of equipment may do so, as most of the stock is out-of-doors.—E. H. Nervo, Geyserville, Calif.

* * *

Biggest Railroad Embankment

The world's largest railroad embankment is about 5 times as big as that mentioned by George M. Hart (Sept. issue). The largest fill, located on the New Jersey cut-off of the D. L. & W., begins 8½ miles west of Lake Hopatcong, N. J., and is known as the Pequest Fill. It extends for about 3 miles, having an average height of 110 feet with a total of 6,625,000 cubic yards of material. This fill is a part of the above mentioned cut-off that extends from Lake Hopatcong to Slateford Jct. near Delaware Water Gap, Pa. Work was started on this line Aug. 1, 1908, and opened to service Dec. 24, 1911. Incidentally, this cut-off is 28½ miles long and effects a saving of 11.12 miles over the original line between Hoboken and Scranton.—W. R. Osborne, 214 Lippincott Ave., Riverside, N. J.

* * *

96 Miles in 85 Minutes!

Last June 29th I left Philadelphia on P. R. R. train No. 11, intending to get Mo. Pac. train No. 9 at midnight in St. Louis to go to Kansas City. This is the last train until 9.00 the next morning. All went well until just west of Columbus, O., where we suddenly felt an emergency air application, and smelled gasoline; we had hit a truck! Because the engine was equipped with cab signals, it was necessary to get permission to go ahead on account of the equipment being damaged in striking the truck.

As we left Bradford, the wayside signals went out. These signals are position lights. For a short distance, therefore, we went ahead on "smoke signals." Reaching Richmond, we were given a K2 type engine to replace our damaged K4. This engine could not keep up the speed, consequently we arrived in Indianapolis one hour late.

There was quite a lot of work to be done in Indianapolis, so we were still an hour late leaving. We were given a K4 and, believe me, K4's can travel when they start! This one lived up to its reputation. Just outside of Brazil we heard a peculiar noise, and knew we'd lost a cylinder (a valve pin had broken). Of course it stopped on dead center and had to have a shove to start.

When we left Terre Haute, we were one hour and 38 minutes late, with a fourth engine at the head end. Since I had had but 44 minutes for my connection, I was quite sure I wouldn't make it. But how that iron horse did step on it! We made the 96 miles from Effingham to East St. Louis in 85 minutes, arriving one hour and 5 minutes late.

To make the story end right, we found the Mo. Pac. train waiting for a Kansas City car of mail. It left St. Louis 45 minutes late, but arrived in Kansas City on time.—W. E. Bostwick, 437 W. School Lane, Philadelphia, Pa.

* * *

Horse-Car Days

Jas. F. McGarr said that the expression "put her in the company's notch" meant to "big hole 'er." Around these parts it means to put the Johnson bar at the end of the quadrant. Old-timers give the reason that in such position the engine uses the most steam and therefore the most fuel, thus costing the company the most to run the engine.

Why don't you have a page in each issue filled with scenes from electric roads? Some are more interesting than steam roads. If you care to do this, I will start you off with a scene of our now abandoned car barns with some of the cars in front of it. The street cars from this line are the only ones of their kind in America, to my knowledge, because they were all built at our local carriage works, now abandoned.

The Cortland County Traction Co. had been in existence over 35 years as an electric line. Motorman Lanigan had been with the company from the time it put electric cars on its horse-car line until its abandonment in 1931. This line extended 14 miles from Cortland through Homer and Little York to Preble, and 4 or 5 miles from Cortland through Pokeville to McGraw. When I was a kid, I ran a car from Homer to Preble while spraying the track with weeds.

David Harnum (better known as "David Harum" in the book written about him under

that name) lived in Homer and was a shrewd horse trader. A man came to him with a horse so wild that it couldn't be harnessed because it would kick the dashboard right off a wagon. Harnum bought the animal for a good price, and the man who sold it thought he had at last gypped the famous Harnum.

Now, this happened in the days of the horse car. David induced the C. C. T. Co. to let him have a car with a metal dashboard. He hitched the wild creature to that vehicle. Well, it was a sight for sore eyes to see David Harnum standing in front of the car with that cussed horse beating a tattoo with its hoofs on the metal dashboard. The animal had to keep between the rails, because the car was too heavy to get off the track. Harnum drove the 3 miles to Cortland and back, and cured the horse of kicking.

Next day the man who had sold the beast was admiring the way one of Harnum's steeds was pulling a wagon, and offered to buy it for a fancy price. "Done," said David. After the deal had been completed Harnum told the man he was buying back his own horse!—F. D. REESE, 4 Charles St., Cortland, N. Y.

* * *

The Reader's Viewpoint

The only time I ever got a kick out of riding an electric train was when the juice went on the blink and they had to tow us in with a steam hog. Gee, what a difference in spirit, in feeling, in sound, in movement and smoothness when a steam baby flits one along the steel ribbons! Electric motors do fit fine in desk fans and vacuum sweepers, but never on the business end of a string of railroad coaches. I can't enjoy a train ride unless I see and smell the smoke and steam, and hear the exhaust bark and roar, the pop valve and cylinder cocks hiss, and the whistle shriek.—HENRY WENZEL, R 6, Box 267, Little Rock, Ark.

* * *

Your fiction is common nonsense. Annul gangster and murder stories. Your fact articles and true tales are good.—BENJ. STOPPER, 227 Highland Ave., Chester, Pa.

* * *

If you must print fiction, let fellows like Gilbert A. Lathrop and E. S. Dellinger handle the writing. Let's have more feature articles such as "City of Iron Horses," by W. A. Lucas.—D. A. SOMERVILLE, 79 W. Essex Ave., Lansdowne, Pa.

* * *

Sidetrack the lurid fiction. Give us more true tales and good pictures.—W. D. STOWMAN, 7444 Forest Ave., E. Germantown, Philadelphia, Pa.

* * *

I find only one fault with the magazine: you haven't enough locomotive pictures.—WAYNE PRIWER, 1606 Lagonda Ave., Springfield, O.

* * *

Your magazine contains too much railroad data and not enough stories.—THEODORE HANSEN, 7843 82nd St., Glendale, L. I., N. Y.

* * *

I would like to get a letter from a locomotive engineer or fireman.—JACK FOOTE (age 12), 1819 N. 51st St., Milwaukee, Wis.

"Colorado Midland"

All the stories in the September issue were good, but the one I liked best was "Colorado Midland." Why not suggest to your staff writers to bring these old abandoned roads to life again in fiction, basing the plot on facts, as W. E. Hayes did with "The $50,000 Race"?—ROY PETERSON, R. R. 3, Belvidere, Ill.

* * *

"Colorado Midland" gives a vivid description of mountain railroading. In 1905 I traveled from Manitou to Cripple Creek and return over the Midland on a Sunday excursion, and thought it a rough pike. Coming back late in the evening, we were laid up several hours in the toughest part of Ute Pass by wreck of a circus train in one of the many short tunnels. A lion cage had proved too tall for the bore and was smashed against the roof, whereupon the poor lion, scared almost out of its wits, crawled under the halted train and refused to budge. A tarpaulin was finally spread over and around the car beneath which the frightened animal had hid; and it was prodded with poles until glad to enter another cage. Three or four other long excursion trains were held up behind us.—FRED B. OTIS, Bedford, Ind.

* * *

The "Colorado Midland" story sure interested me. A few weeks ago I drove beside what is left of the Midland from Colorado Springs to Cripple Creek and Victor. I also drove on or beside the old roadbed as far as Aspen, Colo., west of the Busk Tunnel.—ALLAN SHARPE, 49 Ralph Ave., White Plains, N. Y.

* * *

I spent my boyhood in Colorado City, knew quite a bit about motive power, and knew many C. M. employees. The author of your "Colorado Midland" novelette is familiar with his subject. His figures are O. K. In one place he mentions the call boy with his high derby on one side of his head. The C. M. had just such a call boy. He was a Negro named "Morse." He was also Western Union messenger, depot baggage man, janitor, and shotgun messenger when they used to get the gold bullion from the ore mills. He was a very popular character. Morse continued in the above capacities for 7 or 8 years, losing out only when they found out he was reporting "rails" sick when they were really tipsy. I believe he died at Los Angeles in 1913.—H. A. STANLEY, 595 21 St., Oakland, Calif.

* * *

E. S. Dellinger has improved wonderfully in the last year. Too bad that most of your authors have to use crime and the pretty girl as central motives. All the "pretty girls" in your stories lack sex appeal except for Dellinger's *Redhot Frost*. He has made a real and lovable girl character there.

It's strange that we never see anything of the old Trinidad-Raton Pass Division of the Santa Fe down in New Mexico. That division can vie

with the famous Colorado Midland any day for old-time railroading. My father was a cattleman and also ran a drug store at Raton for a while. He kept a stack of the old RAILROAD MAN'S on the counter and always sold 'em to the last copy.

He used to drive a team and buckboard. One September day he took me to Trinidad. That goes down in memory as the most interesting day of my life. We counted 15 Santa Fe trains westbound between Trinidad and Starkville, about 16 miles, that afternoon! Nine of these had 4 engines each, while 6 had 3 engines each.

Turn some good writer loose on that old Raton Division and let's see what he will dig up. You are getting out a fine magazine, but here's hoping to see a waning of the crime motive.

The circular band with Pike's Peak triangle within it described in "Colorado Midland" (Sept. issue) was not the only trademark of the Colorado Midland. From 1898 to 1901 the Midland used the most beautiful insignia of any railroad I have ever seen. This was painted on at least 2 passenger engines and was used on all the passenger department's stationery and advertising.

It represented a Ute Indian on a war pony with a flying mane and tail with eagle feathers on the bridle. The proud Ute held a long spear on which was mounted a shield bearing the Pike's Peak triangle. The Ute was gazing across vast South Park while the roaring South Platte tumbled below him and the vast Mt. Massive with her snow crown and the smelters and city of Leadville towered to the heavens in the background. In the foreground wound a Midland passenger with headlight beaming.

You needed no other language to tell you the Ute and the Midland were the lords of this mighty wilderness of the Rockies. Can anyone dig up this fine insignia?—NORMAN GILLIE, Missoula, Mont.

* * *

Wreck at Sand Patch Mountain

Answering "Engineman's" query on the B. & O. wreck at Sand Patch Mountain, Dec. 12, 1912: That night I was a B. & O. telegraph operator working third trick at Keystone, Pa., a block office about one mile west of Sand Patch. My father, John M. Evans, was employed in the B. & O. water department. He had been working the pump at Sand Patch and was deadheading home to Hyndman (where I still live), on engine 2541, when he died in the wreck.

The train, eastbound, consisted of engines 2379 and 2541 with 46 cars, mostly coal. Engineer Newton Martz was in charge of 2541, coupled next to the train. It was about 10 degrees below zero, with a foot of snow on the ground. Before descending the mountain, the train had stopped at Sand Patch for water and inspection. Either the air on the train froze or the brakeman failed to turn on the angle cock on the engine after taking water. I am not sure that it was ever ascertained, for the equipment was entirely demolished after the accident. After descending the mountain about a mile, the engineer discovered he had no air and, with his fireman, dropped off.

At Philson tower, about five miles east of Sand Patch, the operator reported something that looked like an engine and 5 or 6 cars running away. It was going so fast he could not tell what it was. In reality it was the whole train of 2 engines and 46 cars. About a mile east of Philson tower, on Roddy's Curve, the train left the rails at a speed estimated at 90 miles per hour. Both engines were almost buried in the hillside. The wrecked cars piled on top and around them. The bodies of Engineer Martz and my father were in the cab of 2541 and could not be removed until about 6 P.M. I think the fireman was thrown from the cab when the engine left the track. Head Brakeman Masters and two train riders, pinned beneath the wreckage, were not found until next day. Every car in the train, including the caboose, was demolished. All 3 tracks were blocked for several days. The flagman and the conductor were seriously injured.

I have been an op and train dispatcher on the B. & O. Connellsville Division for 24 years and have seen some bad wrecks. If I can be of any further assistance in giving information, will gladly do so.—J. A. EVANS, Box 107, Hyndman, Pa.

* * *

Information Wanted

Would like the words to the poems "Engine 143," "She Waves as His Train Passes," "The Switchman's Sweetheart," and "The Midnight Express." Also the words to a song about a conductor whose bride is killed when they are going on their honeymoon. Each verse ends with "In the little red caboose behind the train."

I would like information about "The Ghost Train" that was supposed to have run on the Auburn branch of the New York Central about 50 years ago.

I have a box filled with railroad things such as 21 copies RAILROAD STORIES, 1932-33; 18 copies BR&P *Railway Life*, 2 BR&P calendars; 9 phonograph records of railroad songs; notebook of railroad songs; 2 timetables (C&NMCN); 2 rule books of train operation; a scrapbook of railroad clippings; 10 RAILROAD STORIES cover reproductions; "souvenir" of train wreck; photo of "New Yorker"; Lionel and Ives standard gage electric trains. Will sell any of these things to highest bidder.—FLORENCE L. AMBROSE, 47 Hannah's Terrace, Rochester, N. Y.

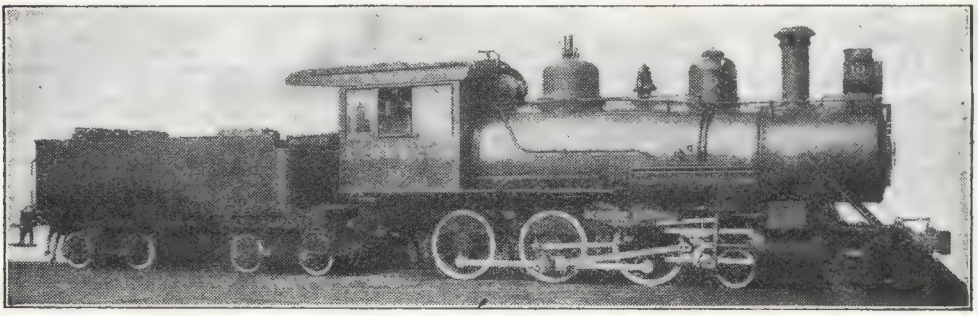
* * *

Does anyone know stories about the old Florence & Cripple Creek Ry. in Colorado? There should be some good ones about that short line, for it was built in the gold and silver mining boom. In 1886 it was operating passenger trains as well as freight, but before 1912 it had become merely two streaks of rust—and memories!—MRS. GRACE BAILEY, 1110 Madison, S. E., Grand Rapids, Mich.

* * *

Would like to buy old copies of RAILROAD MAN'S MAGAZINE before 1919.—WILLIAM BRICKMANN, 2327 W. North Ave., Baltimore, Md.

A Narrow Gage Golden Anniversary



One of the Baldwin-Built Ten-Wheelers on the E.T. & W.N.C.

DOWN in the mountains of eastern Tennessee and western North Carolina there runs a little three-foot gage railroad which, although it is fifty years old, has never been through a receivership or reorganization. It is the East Tennessee & Western North Carolina R. R., and it runs 34 miles between Johnson City, Tenn., and Cranberry, N. C.—just as it did when it was built in 1883. Its construction was a real engineering feat, for it winds several miles through the Doe River gorge, where the roadbed is simply a ledge carved out of the rock walls of the canyon, with an occasional short cut through a tunnel.

In spite of its high cost, it paid for itself, for it hauled a great deal of iron from Cranberry. When the iron mine suspended operations lumber took its place as the backbone of the road's traffic. To open large timber tracts an extension was built between 1916 and 1918 from Cranberry to Boone, N. C., 32 miles, with a two-mile branch from Montezuma to Pineola, N. C. This was called the Linville River Ry. As lumbering declined the railroad found more business in shipments to and from large rayon plants in Elizabethton, Tenn. And to beat the busses and trucks at their own game, it organized a highway transport company of its own. Thus it has kept its head well above water.

There is some beautiful scenery on the E. T. & W. N. C. as it winds up the Doe River gorge. Soon after emerging from the gorge the road crosses the Linville Plateau and curves around the side of Grandfather Mountain on a 4 per cent grade, reaching at Linville Gap the highest point on a regular passenger and freight railroad east of the Rockies, 4,100 feet above sea level.

The road owns 10 locomotives: Nos. 8-12, 14, 4-6-0 types; No. 7, 0-8-0; No. 5, 2-8-0; No. 28, 2-6-0. A standard gage engine, No. 828, is now out of service. It was bought from the Norfolk & Western, while all the others are Baldwin-built except No. 7, an Alco job. Nos. 5 and 28 carry the Linville River initials. There are also 14 passenger and 210 freight cars (including 8 standard gage). Many industries on the E. T. & W. N. C. between Johnson City and Elizabethton send and receive carload shipments, and so to save transferring goods a third rail has been laid 1 foot 8½ inches outside one of the regular rails. Thus cars of other roads can be handled. This double gage system extends for eleven miles. Since No. 828 is no longer serviceable, several of the narrow engines are kept busy with the standard cars.

Passengers haven't been plentiful the last few years, but the company made the most of its 50th birthday, and coaches parked on side tracks were brought into the shops to be conditioned for service. The parlor car "Azalea," which was run on these trains, has the comforts of crack trains, with its wicker chairs, a standard Pullman section—minus the upper berth—across the car, and an observation platform on the rear. So that everybody could get a good look at the unusual scenery the last car on the train was entirely open except for the roof. Especially for the occasion Engine No. 14, a little ten-wheeler, was painted a bright green and the brasswork was given a high polish. Fares of about one cent a mile and some good advertising drew out the crowds from Johnson City and the surrounding territory. Let's hope this pike's next fifty years will be even better than its last. It has rendered good service to a country almost entirely dependent upon it for life's necessities.—John R. Wilmot.

International Engine Picture Club

T. O. ACREE, Court-View Apts., Court and Vine Sts., Cincinnati, O., has 4 x 5 prints of Southern, Big Four, PRR, N&W, NYC, L&N, C&O, B&O, CNR, CPR, 10c each, for 25c. Also good 8 x 10.

A. F. AHLSTROM, 4439 N. Lincoln St., Chicago, Ill., has various 4½ x 2¾ views of motive power at Century of Progress.

C. E. ALSDORF, 181 Monitor St., Brooklyn, N. Y.

D. ANDREWS, 517 N. Main St., Chariton, Ia., has prints of CB&Q fast mail of 1898 at 5c each.

L. G. AREND, 757 Sedam St., Cincinnati, O., will buy small and narrow-gage lines negatives. Has many assorted photos for sale at 12 for $1.

C. E. ARNOLD, JR., 1910 19 St., Parkersburg, W. Va., will trade negatives or buy pictures of C&O 5200 (no Alton) Pacific type. Will also buy NS and VaC prints. Has Royal Scot prints for sale; reasonable.

E. BARLOW, 52 E. Highland, Sierra Madre, Calif., will sell public or government timetables of Western and South Australia Railways to highest bidder or trade for train orders.

W. BEARD, 54 E. 3 St., Brooklyn, N. Y., has Erie motive power.

N. BEIER, 2222 Rusk St., Madison, Wisc., will draw 10-inch fully colored trade mark of your favorite road, suitable for framing, in exchange for 10 engine photos. Send color details.

L. BERTRAM, 180 Hutton St., Jersey City, N. J.

G. BJORQUIST, Moorhead, Minn., wants GN Nos. 129, 181, 245, 214, and NYC No. 999.

C. C. BREWER, 108 Highland Ave., Lewistown, Pa., has complete file of "Railroad Man's" and "Railroad Stories" for $12.50. Also "Baldwin Locomotives," various copies up 1926; 1926 to April 1933 complete; lot for $25, or 80c each postpaid. Copy of 1927 "Locomotive Cyclopedia" for $5.

L. M. BRODBECK, Pere Marquette agent, Woodbury, Mich., is author of article on engine picture collecting in the September issue of the "Rail," C&O and PM Co. magazine, 2002 Terminal Tower, Cleveland, O.; 10c per copy.

C. W. BURNS, 1314 Logan Ave. N. W., Canton, O., has old Brill Magazines for sale or trade. Wants "Baldwin Locomotives" prior to 1926, also July, 1926. Has few photos to sell or trade.

J. CHAPMAN, 901 39 St. E., Savannah, Ga., has 8 C of Ga Magazines, 3 ACL "News," 1 "Railway Employee," and 1 C of Ga employees' timetable. Highest bidder.

A. R. CHRISTMAS, 4549 Kensington Ave., N. D. G. Montreal, Que., Canada, has 2½ x 4¼ size of CPR, CNR, D&H, CVt, Rutland, DL&W, NYC and many others to sell for 5c each. Negatives of CNR, CPR and NYC running into Montreal, at 10c each.

E. S. COLE, 10 Bertro Ave., Upper Darby, Pa., has "Moody's Railroads" for 1930 at $3. Will send C. O. D. plus postage.

W. S. COLLIER, 115 K St., Needles, Calif., wants to buy good postcards of Santa Fe, SP, UP, Erie, B&O, NYC, GN. Has Santa Fe 3700, 3800, M-180 and others to trade.

E. J. CONDON, 561 E. 33 St., Paterson, N. J., has Erie motive power including 5000 series motors, at 10c each.

H. E. COPELAND, Box 443, Lenoir City, Tenn., wants "Baldwin Locomotives," "Railway Age," "Railway & Locomotive Engineering," and old issues of "Railroad Stories."

D. CORNISH, 14809 Hilliard Rd., Lakewood, O., trades foreign stamps for railroad clippings, photos, timetables, magazines, tickets, etc.

DAY CO., Yucaipa, Calif., offers miniature picture of Peruvian loco or Western power with each "Game of the Rails," (Model 3) for $1. Have 2¼ x 3¼ snap of underpass of WP, SP and Lincoln Highway near Altamont, Calif., 10c. Other pictures, same size, 15c, including Santa Fe engine of 1890 and several SP's.

F. R. DIRKES, JR., 50 Robertson Rd., Lynbrook, N. Y., has CNJ, LV, L&NE, LI and Reading photos. Also Western Union camp cars and LI two-deck car. Will sell or trade for other engine photos, wrecks, employees' time cards, train orders, and clearance cards. Stamp for list.

E. F. DUNLAP, 432 E. 111 Pl., Chicago, Ill.,

Two of Our Members Snapped in Front of the New Austro-Daimler Motor Railcar Which the Long Island R. R. Has Been Trying Out. Alfred H. Thieberger (Left) and Paul Mesila, 260 Pacific St., Brooklyn, N. Y.

has 500 engine clippings for sale at 1c each. Also copies of old "Railroad Man's" (1915-1918) and other railroad magazines; sell all for $6.

T. R. DUNN, 40 Cowles Ave., Yonkers, N. Y., has New Haven, B&M and other eastern roads, size 116. Negatives or prints for sale or trade.

FULTON'S PICTURE SHOP, Lewis, Ia., has rare old locomotive and train pictures. Stamp for list.

C. H. FUNK, 302 Baltimore St., Hanover, Pa., has 3 railroad calendars, 20 "Trainmen's Journal" cover pictures and 40 issues of "Railroad Stories" (from Jan. 1930) to trade for Lionel standard 2¼-inch track and switch formations.

L. FROMM, JR., 201 W. 105 St., N. Y. C., has CNJ 831 and 832, B&O, Reading prints, 10c each.

F. J. GOLDSMITH, JR., 930 St. Nicholas Ave., N. Y. City, wants photos of electric power, all kinds, from all parts of world. Buy, sell, trade.

E. GROVER, Bristol, Vt., wants employees' timetables. Has 116 size Rutland and B&M.

H. J. HARDING, Ceres, Calif., has 2¾ x 4½ of western roads to exchange for others.

S. M. HAUCK, 62 Apthorp St., Wollaston, Mass., will trade New Haven train order blanks for those of other roads. Will sell 120 size prints of Boston, Revere Beach & Lynn (narrow gage) No. 14, and New Haven official car No. 2 ("New England") at 9c each.

D. T. HAYWARD, 2699 Columbus, Ave., Springfield, Mass., will sell B&M, B&A and New Haven prints of locomotives, cabooses, passenger cars, etc.

M. G. HEBERT, 192 King St. W., Sherbrooke, Que., Canada, will sell 3¼ x 4¼ views of head-on collisions, 6 for 50c.

A. HENNIG, 46 Walnut St., Batavia, N. Y., has "Roper's Handbook of the Locomotive" (1882), "Catechism of the Locomotive," Forney (1882), and "Locomotive Up to Date," (1899). To highest bidder. Wants old engines.

C. A. HESS, Clyde, O., has photos of SP, WP, UP, WAB, CGW and MoP to trade or sell. Wants Mallets, also W&LE, GN, D&H, ACL. Buys negatives, any roads. Has W&LE clearance cards and train orders to trade for other train orders or photos. Send list.

E. C. HOWLAND, 564 Main St., Lewiston, Me., wants MeC public and employees' timetables; also wants to buy or rent 1⅝-inch railroad film.

J. C. JOHNSON, Naramata, B. C., Canada.

H. J. KAISER, 10-12 N. Charter St., Madison, Wis., wants 1933 PRR calendar.

O. R. KENYON, 530 E. 4 St., Wilmington, Del., wants certain PRR, Reading, etc.; send stamp for list. Has PRR, B&O, Reading, M&DC, NYC 999, D&H 1403, C&NW 3024, NP 5008 and others. Will trade or buy.

N. LEVINE, 1254 Westchester Ave., Bronx, N. Y. City, wants photos of lesser known roads. Send stamp for list.

H. M. LOBB, R. D. 1, Erie, Pa., wants issues of "Railroad Man's" prior to May, 1917.

M. TOMME, Raymondville, Tex., wants 2⅛ x 4¼ of UP 3503, MeC 1203, NYC Mallets, and old NYC&HR Atlantics. Will trade photos for "Baldwin Locomotives."

F. McKNIGHT, 118 Webster St., Malone, N. Y., has 1932 Pennsy calendar to trade for NYC locos.

E. MAY, 87-27 169 St., Jamaica, L. I., N. Y., wants employees' timetables of NYC Harlem Div., Electric Div., and Hudson Div. Buy or trade.

S. W. MILLER, 2728 Regent St., Berkeley, Calif.

(MR.) SABRO MOLODIMA, care Methodist Ginza Church, Nishi-Ginza, Tokyo, Japan; takes good snaps 2¾ x 4¾ of Japanese engines and trains. (Writes English.) Writes articles for "Railway" monthly magazine published in Japan, etc. Now writing book on rys. and locos of the world. Wants good photos U. S. and Canadian engines at work, scenic or railroad background; big roads. Exchange pictures, information, etc.

L. W. MOODY, Union, Me., has good photos of Sandy River and Rangely Lake and Bridgton & Harrison equipment at 10c each or 12 for $1.

READERS who collect, buy, sell, exchange, or make pictures of locomotives, trains, cars, etc., are listed here as members of the International Engine Picture Club. There are no fees, no dues. Names are published in good faith, without guarantee.

A membership button is given FREE to those who send in a "Reader's Choice" coupon (page 142) and self-addressed stamped envelope. (If you live in Canada or any foreign land, enclose a loose 3c stamp from your own country instead of the envelope.) Address Engine Picture Editor, "Railroad Stories," 280 Broadway, New York City.

Due to limited space, we cannot print details here. Write to members for full information. Use 2c reply postal card or enclose stamped envelope. Do not mail anything until you are sure the other fellow wants it. And remember, nobody likes to get a letter marked "postage due," especially in foreign countries where the rate is high.

In writing abroad, enclose an "International Reply Coupon" to cover return postage. These may be obtained in any post office at 9c each.

J. MURPHY, 505 S. 4 Ave., Tucson, Ariz.

E. L. OESTREICH, 125 Nebraska St., Horicon, Wis., wants employees' timetables: UP, Cheyenne, Wyo., to Ogden, Utah; D&RGW, Salida to Grand Jct., Colo.; CMStP&P, Harlowton, Mont., to Avery, Idaho. All prior to 1930. State price.

A. OLESH, Manville, N. J.

R. PETERSON, RR. 3, Belvidere, Ill., will trade 5 x 7 enlargement of C&NW Class D, 1089, for photo of Class D, 1026 or 1312. Would like to hear from anyone having Class D prints.

J. W. RADER, 63 Ontario St., Corning, N. Y., paints railroad views.

RAILROAD STORIES, 280 Broadway, New York City, wants to borrow photos of Rapid City, Black Hills & Western R. R. to illustrate an article.

E. RICHMOND, 89 Sheridan St., E. Lynn, Mass., trades, buys or sells timetables. Has New England tables.

P. R. RIDNER, 101 Second St., South Orange, N. J., has old Lackawanna, Morristown & Erie, and Rahway Valley engines for exchange.

W. F. RUSSELL, 208 Washington St., Marblehead, Mass., wants negatives all U. S. and Canadian roads. Also wants "Locomotive Cyclopedia," 1922, "Locomotives of the World," edition by Allen.

A. RYNEARSON, 219 S. Main St., Flemington, N. J., wants PRR electric classes to trade for specifications and information on all PRR locos in my collection. Will buy PRR employees' timetable of Atlantic Division.

W. SABISTON, 125 Joseph St., Victoria, B. C., Canada, wants GN locos, old and new.

F. SANKOFF, 326 Selby St., Westmount, Que., Canada, has CPR, CNR, NYC, D&H, CVt, Rutland, B&M, CMSt&P, WP. Wants CNJ, MKT, Alton, NRR of Mexico, D&RGW, CTW, PM, MC, etc. Will trade.

H. H. SCHODDE, 155 South Market St.,

RAILROAD STORIES Reader's Choice
280 Broadway, New York City

Stories, features and departments I like best in the November issue are:

1.....

2.....

3.....

4.....

5.....

6.....

Give us more.....

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Occupation.....

Address.....

East Palestine, O., has "Baldwin Locomotives" to exchange for illustrated Alco or Baldwin records or pamphlets. Or will trade old or modern 5 x 7 or larger photos for them.

W. SCHRIBER, 184 24 St. S. E., Massillon, O., wants all equipment of the Wheeling & Lake Erie. Buy or trade.

L. SCOTT, 111 Walnut St., McKenzie, Tenn., has GN 2017, 3048 and CStPM&O 64 for sale at 10c each; many prints to trade. Free print with first 75 orders.

I. G. SELAND, 4212 Russell Ave. N., Minneapolis, Minn., will trade 10 assorted Minneapolis and St. Paul street car transfers for 10 assorted from California, Milwaukee, or Chicago.

R. C. SELLON, 1014 N. Palm Ave, Burbank, Calif., has 2½ x 4½ prints of SP, UP, Santa Fe and WP, to trade for modern power, all roads. Wants to correspond with fans in Kansas City, St. Louis, Fort Worth, Chicago, Texarkana and Little Rock, Ark.

F. O. SEYMOUR, 1011 Moores River Dr., Lansing, Mich., has postcards of GTW, Wab., PM, MeC, ACL, MC, AA, PRR, M&NE, Big Four, TStL&W, CK&S and Bangor & Aroostook at 10c each or trade for Clover Leaf, CH&D, LE&W, Cin.Nor., and old LS&MS postcards. Also wants negatives of Clover Leaf.

W. SIMMONS, 121 Wayne Ave., Pocatello, Idaho.

D. A. SOMERVILLE, 79 W. Essex Ave., Lansdowne, Pa., will trade 5 5 x 7's for any "Baldwin Locomotives," 100 5 x 7's for an old illustrated builder's catalog prior to 1900, and 50 5 x 7's for one since 1900.

S. SPECHT, 632 E. 5 St., Cincinnati, O., wants old engineers' and directors' reports of early railroads.

B. STOPPER, 227 Highland Ave., Chester, Pa., will sell 17 postcard negatives of all Lackawannas and 24 copies of "Baldwin Locomotives," 1925 on, to highest bidder. Wants Pennsylvania locomotive register for 1915. Has modern one to trade.

H. E. SUMMERS, Pearl River, N. Y., has 225 photos, eastern roads, to trade for Erie and PRR. Send lists.

F. H. SUTTON, 1401 Cady Ave., Omaha, Neb., has 116 size prints, western roads, for sale at 2 for 25c, 5 for 50c, 12 for $1.

(MR.) EIICHI SUZUKI, 26-2 Murasakinoyanagi-Cho, Kyoto City, Japan. (Writes English.) Wants photos of U. S. and Canadian locomotives. Send lists.

R. THOMPSON, Rainy River, Ontario, Canada, will sell "The World's Locomotives" to highest bidder.

R. W. TRAXLER, Box 124, La Place, Ill., has 1911 timetables, B&O magazines and steam thresher catalogs to trade for engine pictures or "o" gage equipment, or sell.

R. B. TREXLER, Daggett, Calif., has complete LaSalle Extension University course on traffic management for sale to highest bidder; wants to trade postcard negatives only.

(MR.) KATAO UCHIDA, 64 Asakacho Hongo, Tokyo, Japan. (Age 20; writes English.) Write.

T. VAUGHAN, 25 Elema Pl., Clifton, N. J., will buy employees' timetables, train and Pullman tickets and Erie equipment, stations, etc.

J. M. WALKLEY, JR., 450 Victoria Ave., Westmount, Que., Canada, has prints of CPR 1026 and other modern engines to trade for old CPR 4-4-2's, 4-6-2's, 0-6-6-0's and other old CPR articulated types.

T. WALSH, 92 W. Hampshire St., Piedmont, W. Va.

J. N. WALTON, 521 Woodcliffe Rd., Stonehurst Hills, Upper Darby, Pa., wants left and right side views of PRR 5017.

T. WILKINSON, 208 Neff Ave., Masontown, Pa., has seven B&O 1929 timetables, many others, also 2¼ x 3¼ prints of Monongahela to trade for employees' timetables and train orders.

H. WOLTERS, 75 N. 7 St., Newark, N. J., has 2½ x 4½ prints of modern U. S. locos, 35 systems listed. Also 5⅜ x 3⅜ and 7 x 3 of all roads. Postpaid on all orders of five or more. With orders of 40c or more one free print of the Royal Scot under own power. Will buy side-view negatives.

(MR.) YOSIZANE YONEDA, Daigo, Fusimiku, Kyoto City, Japan; wants photos of U. S. and Canadian engines, cars, etc.; also data and railroad facts. Exchange. (He is student at Third Imperial College of Japan; writes English.)

* * *

Abandonments

Gulf, Colorado & Santa Fe, Bragg to Saratoga, Tex., 9 miles. Long Island, Port Jefferson to Wading River, N. Y., 11 miles. Burlington, Osceola to Van Wert, Ia., 11 miles; Leon to Decatur City, Ia., 7 miles; Englewood to Spearfish, S. D., 32 miles. Illinois Traction, Hillsboro to Litchfield, 8 miles, and Ridge Farm to Georgetown, Ill., 5 miles. Union Pacific (all in Kansas), Knox to Clay Center, 143 miles; Clay Center to Concordia, 36 miles; Lawrenceburg to Belleville, 17 miles. Milwaukee Road, Oconto to Oconto Jct., Wis. Southern Pacific, Hachita to Oil Siding, N. M., 38 miles. Texas & New Orleans, Nome to Sour Lake, Tex., 8 miles. Cincinnati-Nashville Southern, Algood to Livingston, Tenn., 17 miles. Colorado & Southern, Parlin to Quartz, Colo., 18 miles.

* * *

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* * *

PHOTO PRIZE CONTEST WINNERS

Following are winners in the Engine Photo Contest for pictures sent in between June 15 and July 15: George Lehnerer, 900 Third Ave., Rock Island, Ill.; C. F. McBride, Digby, Nova Scotia; J. F. Cummins, McAllen, Tex.; R. E. White, Drayton Plains, Mich.; R. P. Middlebrook, 2744 Columbia St., San Diego, Calif.; Harry Ebert, 6 Broadway Ave., Toronto 12, Ont., Canada; Albert Crosby, Box 385, Shelby, N. C.; H. E. Johnston, Box 82, Scotch Plains, N. J.; A. M. Walker, 124 Garfield Ave., Trenton, N. J.; Luke Sinclair, 2423 15th Ave., San Francisco, Calif.; F. H. Sutton, 1401 Cady Ave., Omaha, Neb.

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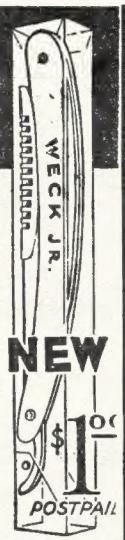

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28x4.75-19		2.20	0.95	32x4	2.75	0.85
29x4.75-20		2.25	0.95	33x4	2.75	0.85
28x5.00-19		2.60	1.05	32x4½	2.95	1.15
30x5.00-20		2.60	1.05	33x4½	2.95	1.15
28x5.25-18		2.65	1.15	34x4½	2.95	1.15
29x5.25-19		2.75	1.15	30x6	3.25	1.35
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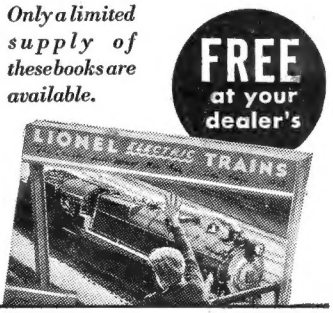

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